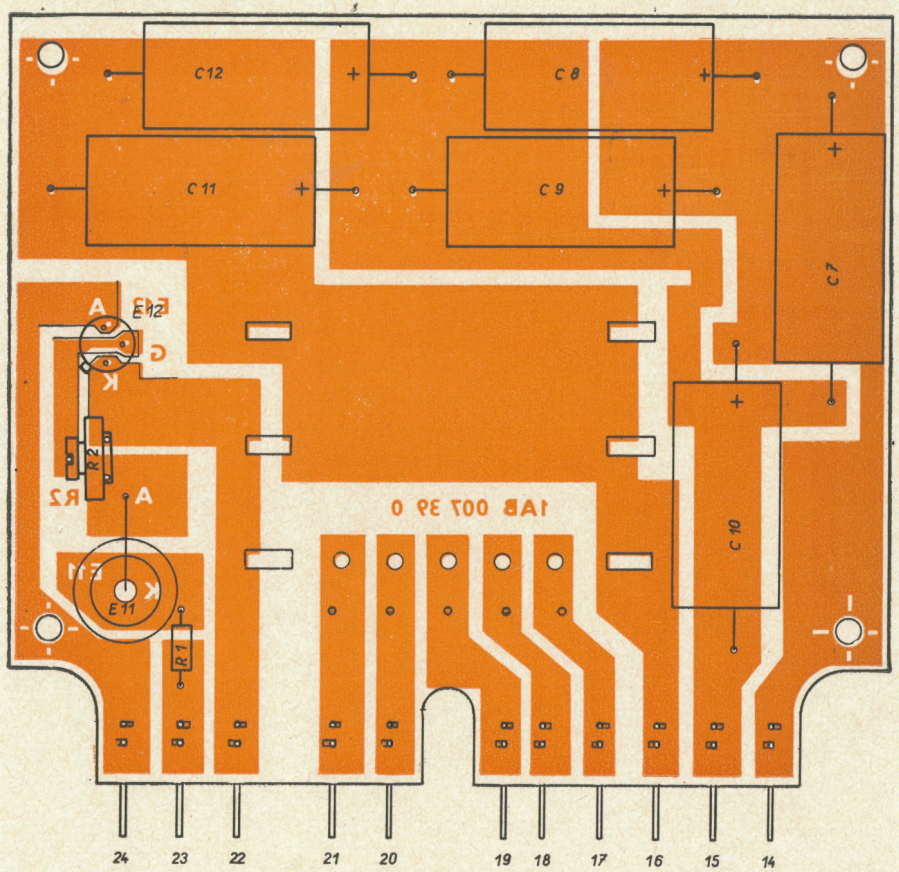
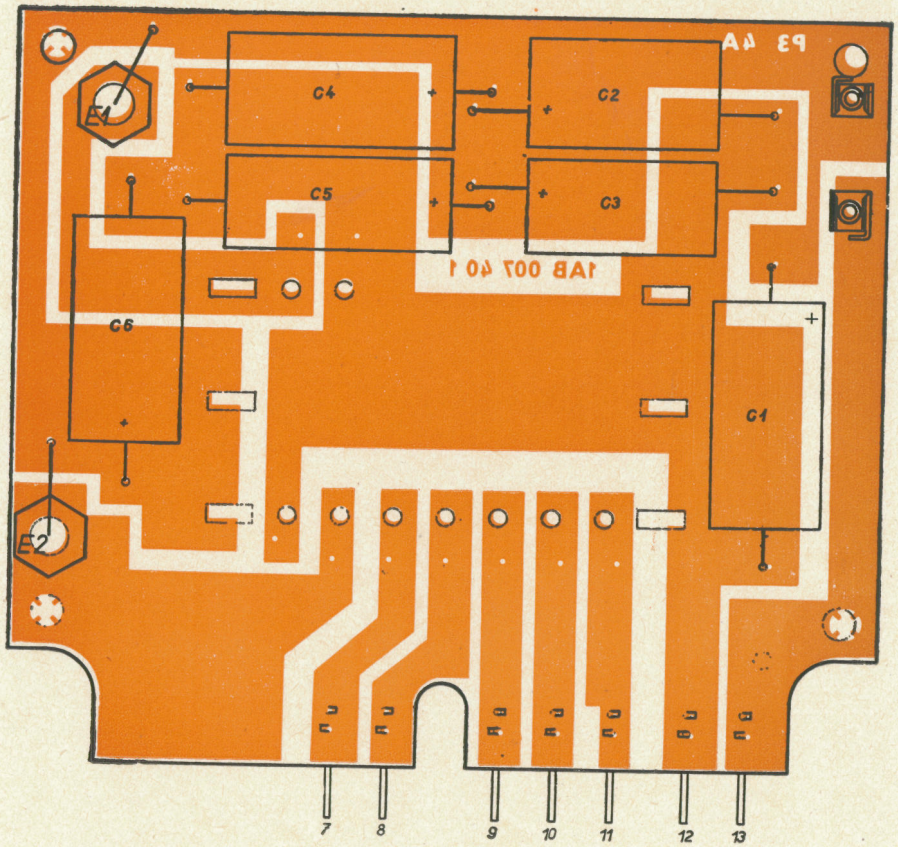


Montážní jednotka
Монтажный блок
Mounting unit

1AF 007 39

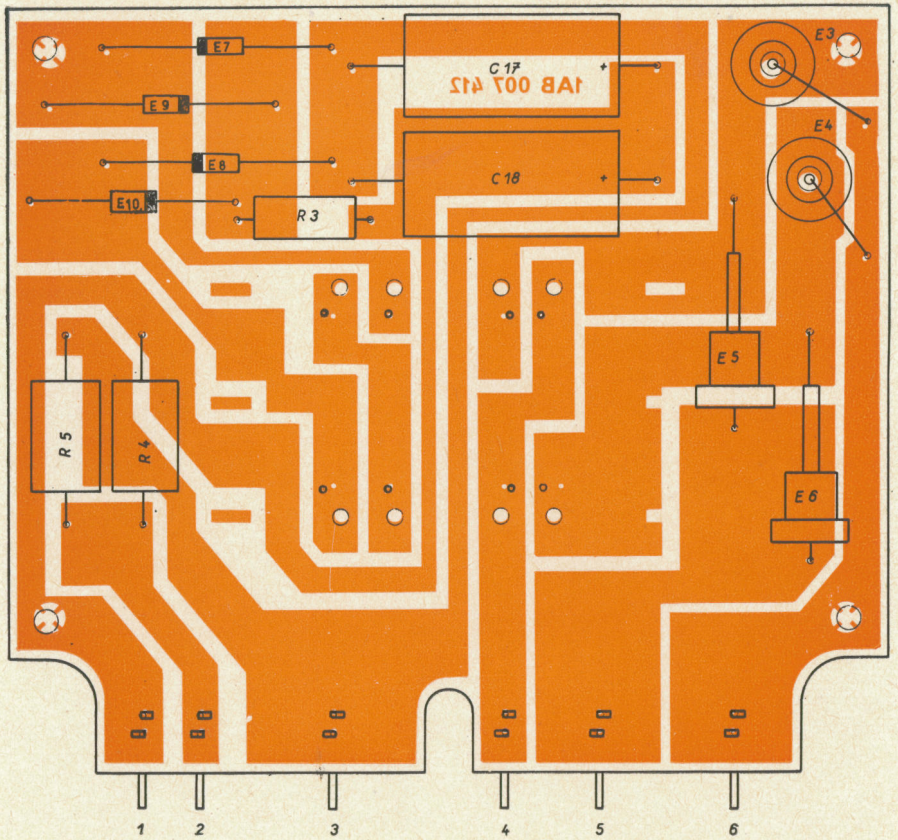
BM 526/1



Montážní jednotka
Монтажный блок
Mounting unit

1AF 007 40

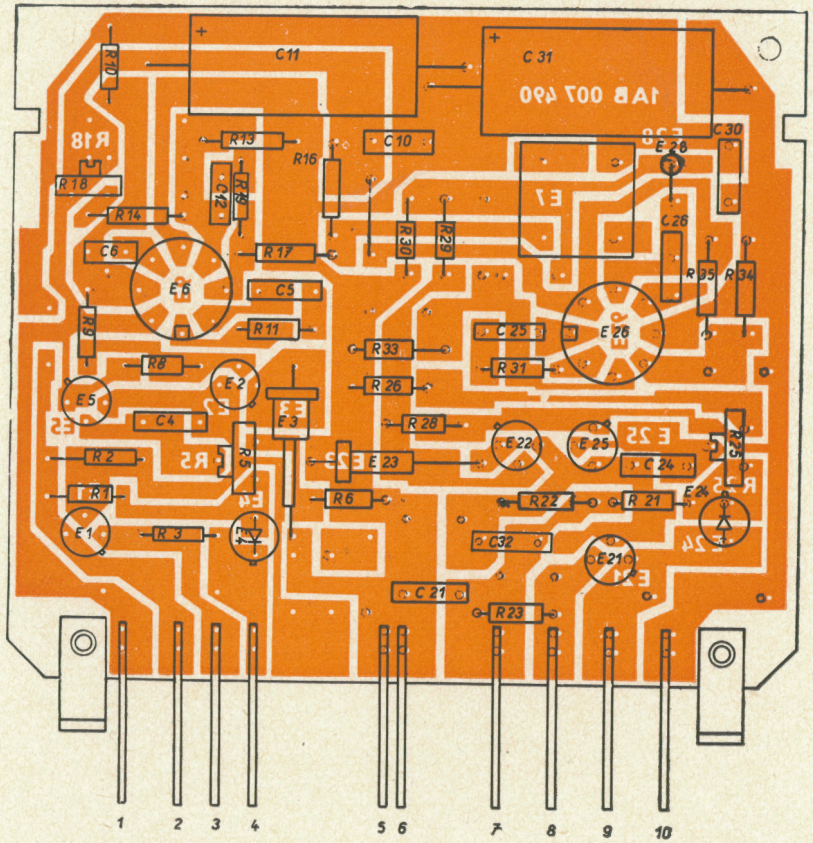
BM 526/2



Montážní jednotka
Монтажный блок
Mounting unit

1AF 007 41

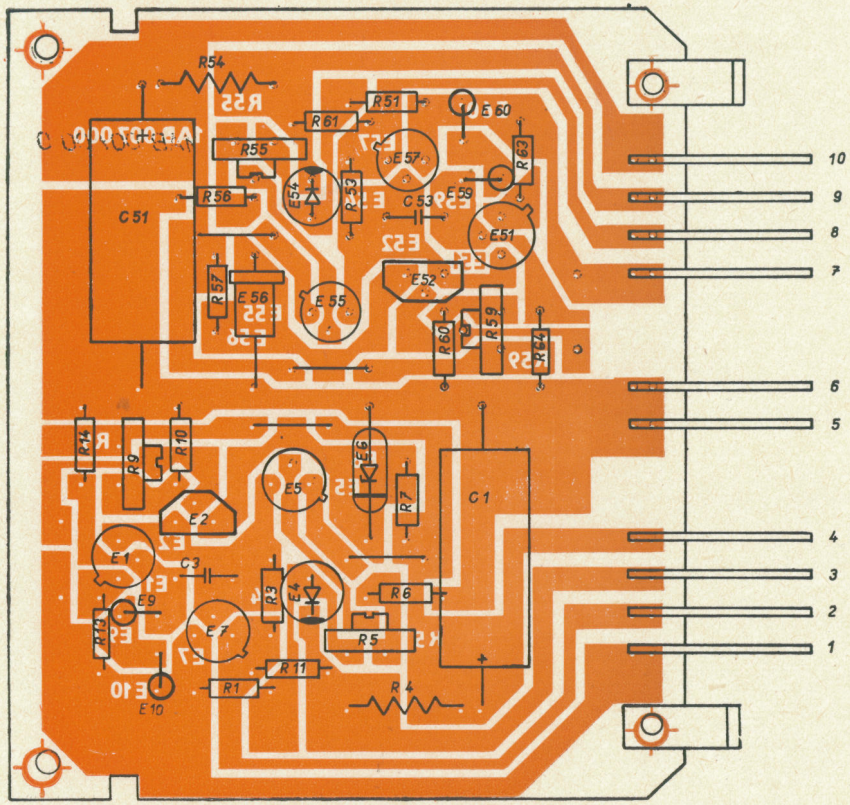
BM 526/3



Stabilizátor ST2
Стабилизатор ST2
Stabilizer ST2

1AF 007 49

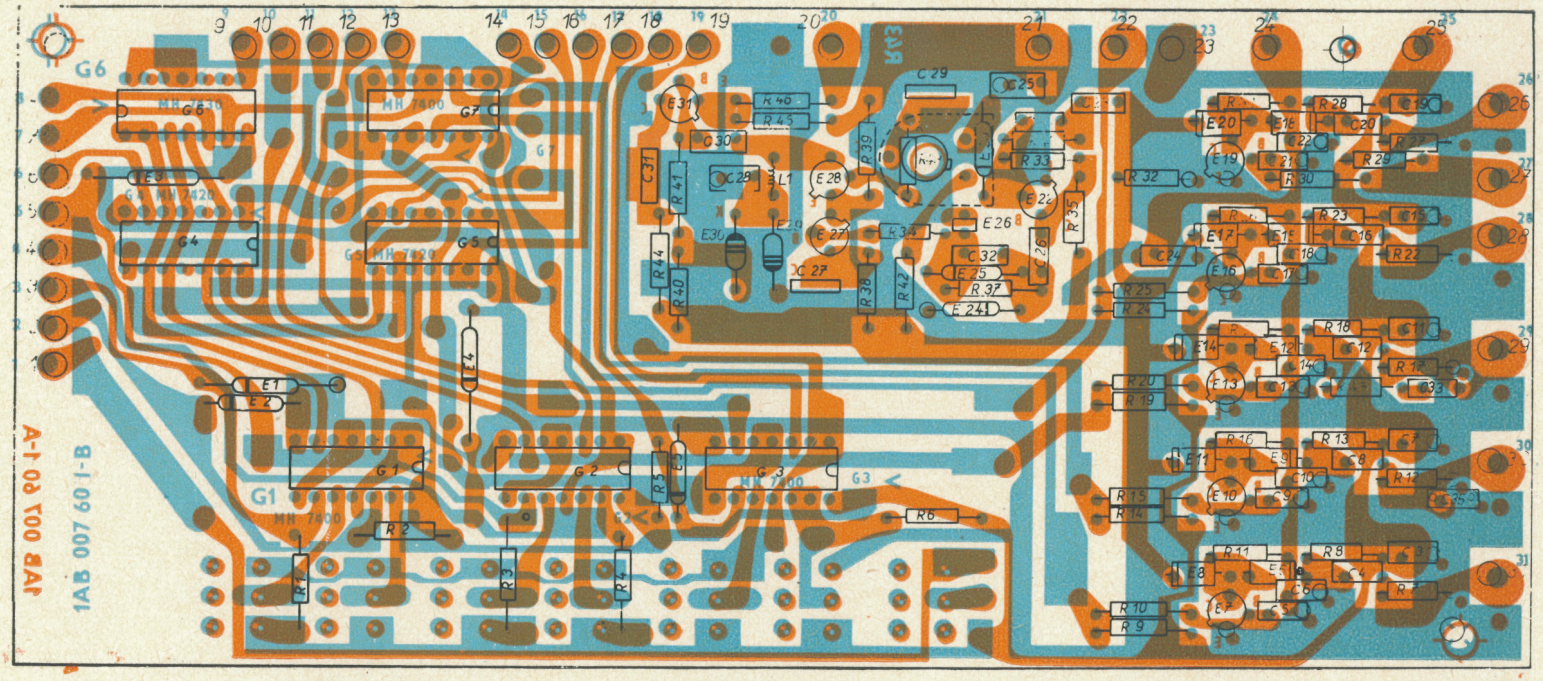
BM 526/4



Stabilizátor ST1
Стабилизатор ST1
Stabilizer ST1

1AF 007 50

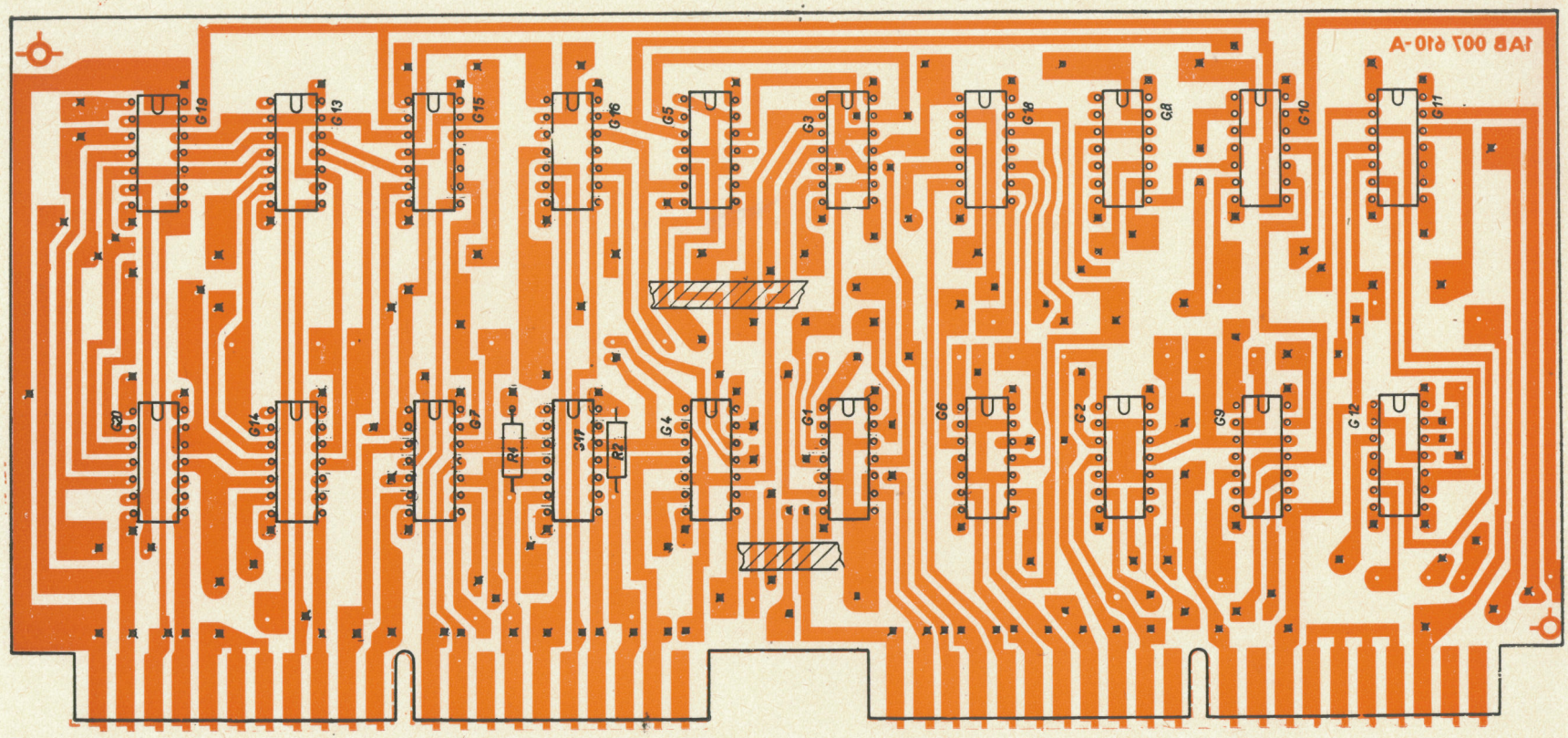
BM 526/5



Jednotka přepínače funkce JPF
Блок переключателя режимов работы JPF
Unit of mode selector JPF

1AF 007 60

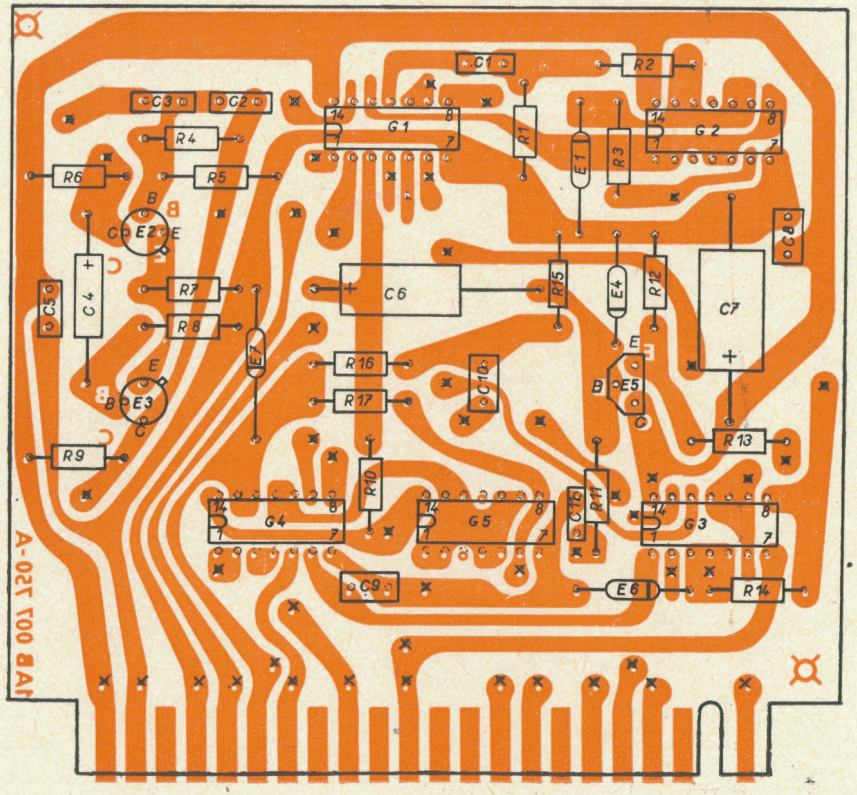
BM 526/6



Jednotka výstupních informací JVI
Блок выходных информаций
Unit of output information JVI

1AF 007 61

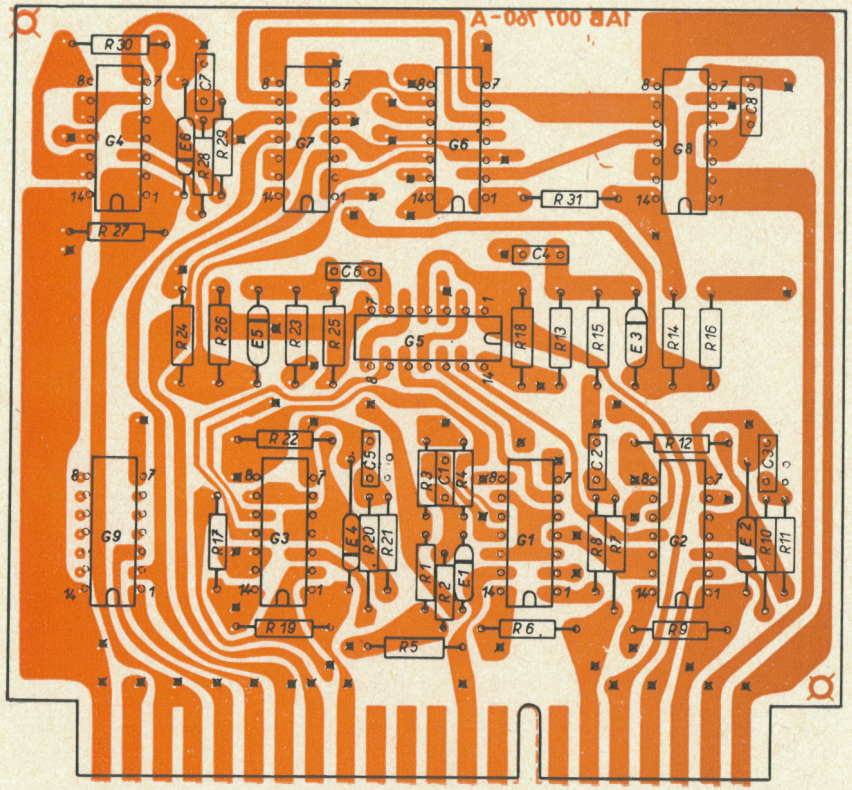
BM 526/7



Řídicí jednotka ŘJ
Управляющий блок ŘJ
Control unit ŘJ

1AF 007 75

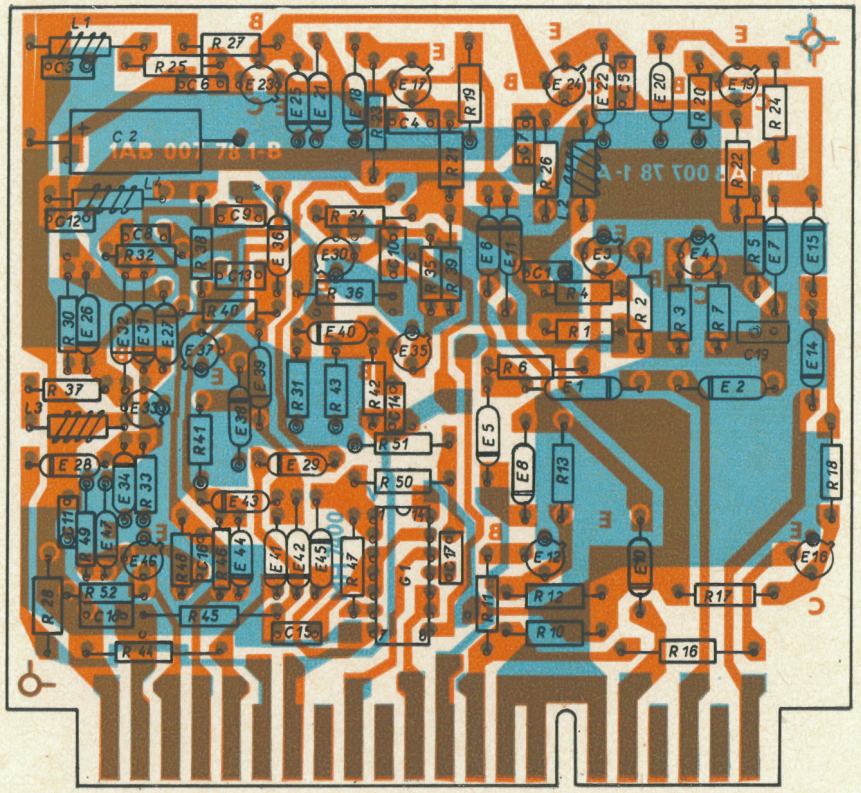
BM 526/8



Jednotka Standard Interface JSI
Блок "Standard Interface" JSI
Unit of standard interface JSI

1AF 007 76

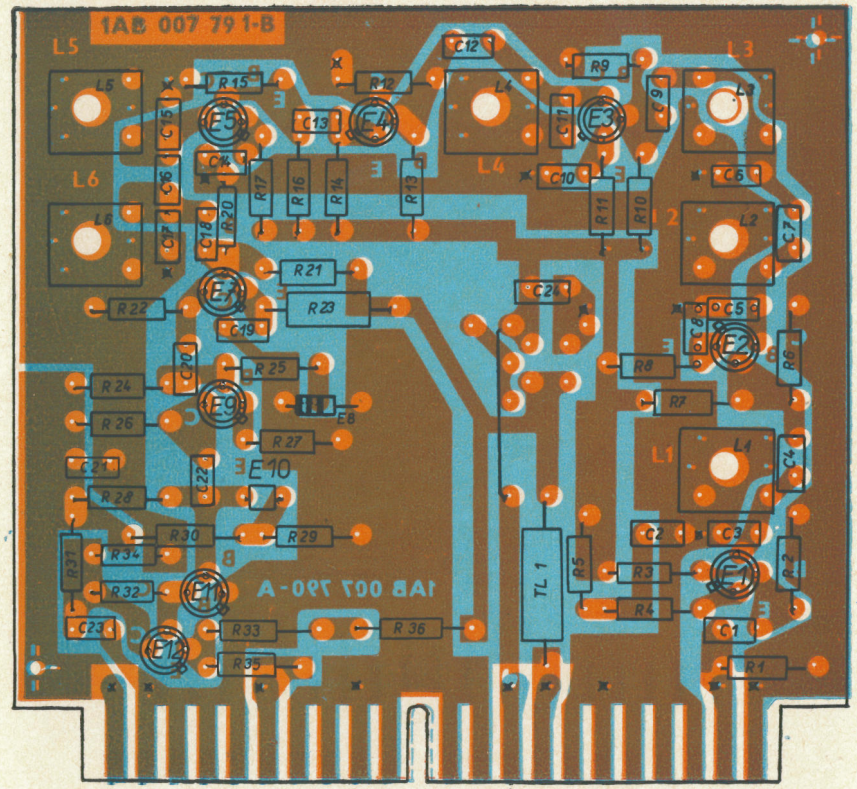
BM 526/9



Jednotka ovládání hradla JOH
Блок управления вентилем JOH
Unit of gate control JOH

1AF 007 78

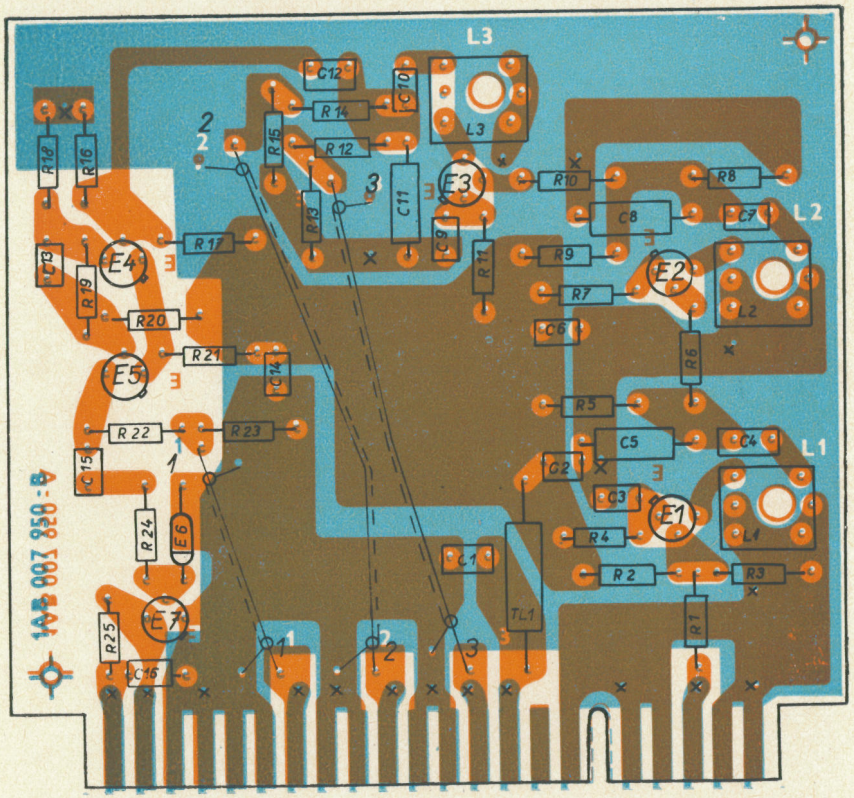
BM 528/10



Násobič 100 MHz N100
Умножитель 100 МГц N100
Multiplier 100 MHz N100

1AF 007 79

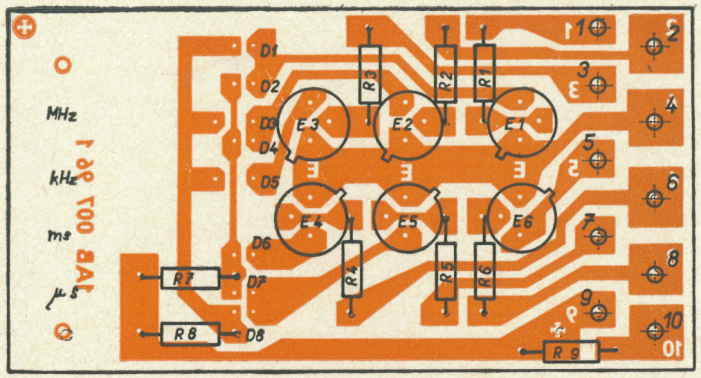
BM 526/11



Násobič 10 MHz N10
Умножитель 10 МГц N10
Multiplier 10 MHz N10

1AF 007 95

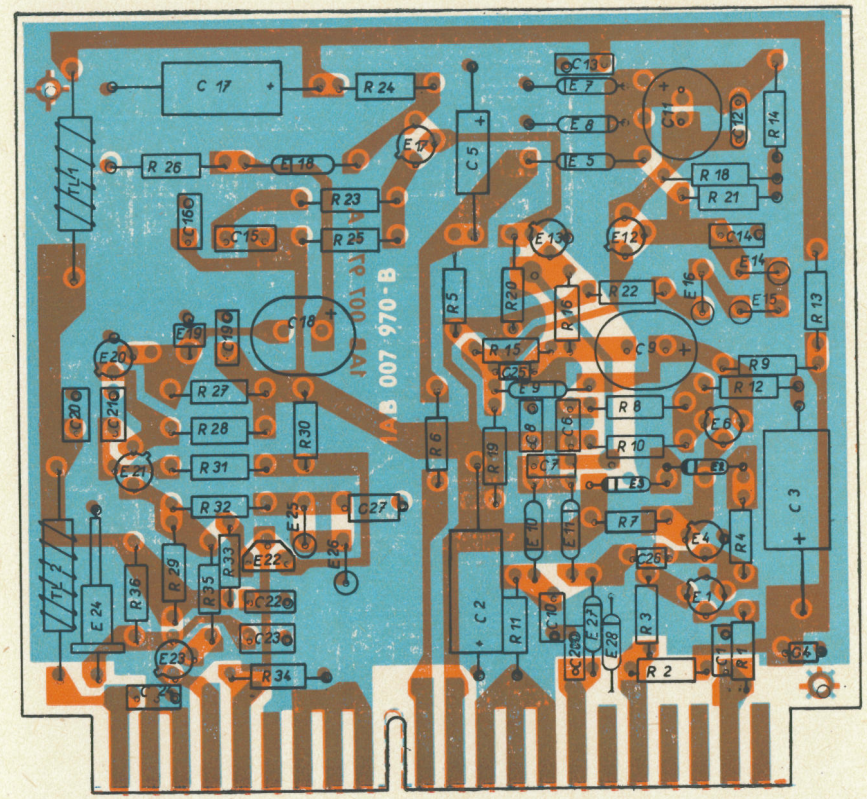
BM 526/12



Jednotka znaků
Блок знаков
Unit of symbols

1AF 007 96

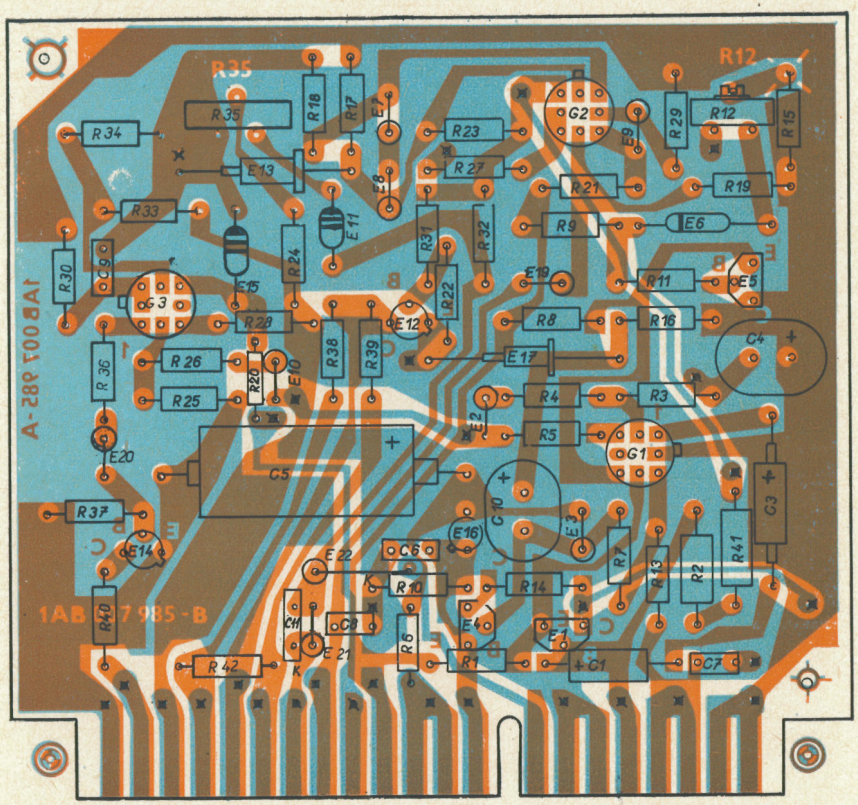
BM 526/13



Zesilovač A1
Усилитель A1
Amplifier A1

1AF 007 97

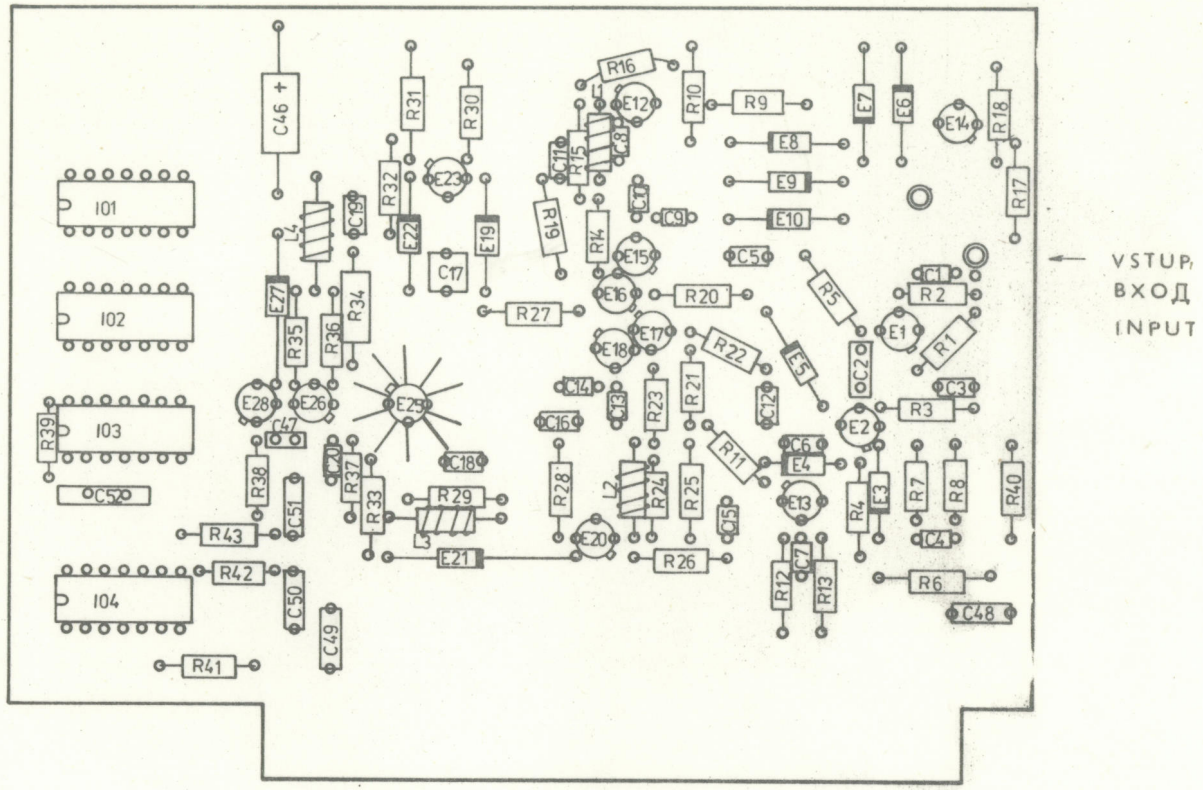
BM 526/14



Zesilovač A2
Усилитель A2
Amplifier A2

1AF 007 98

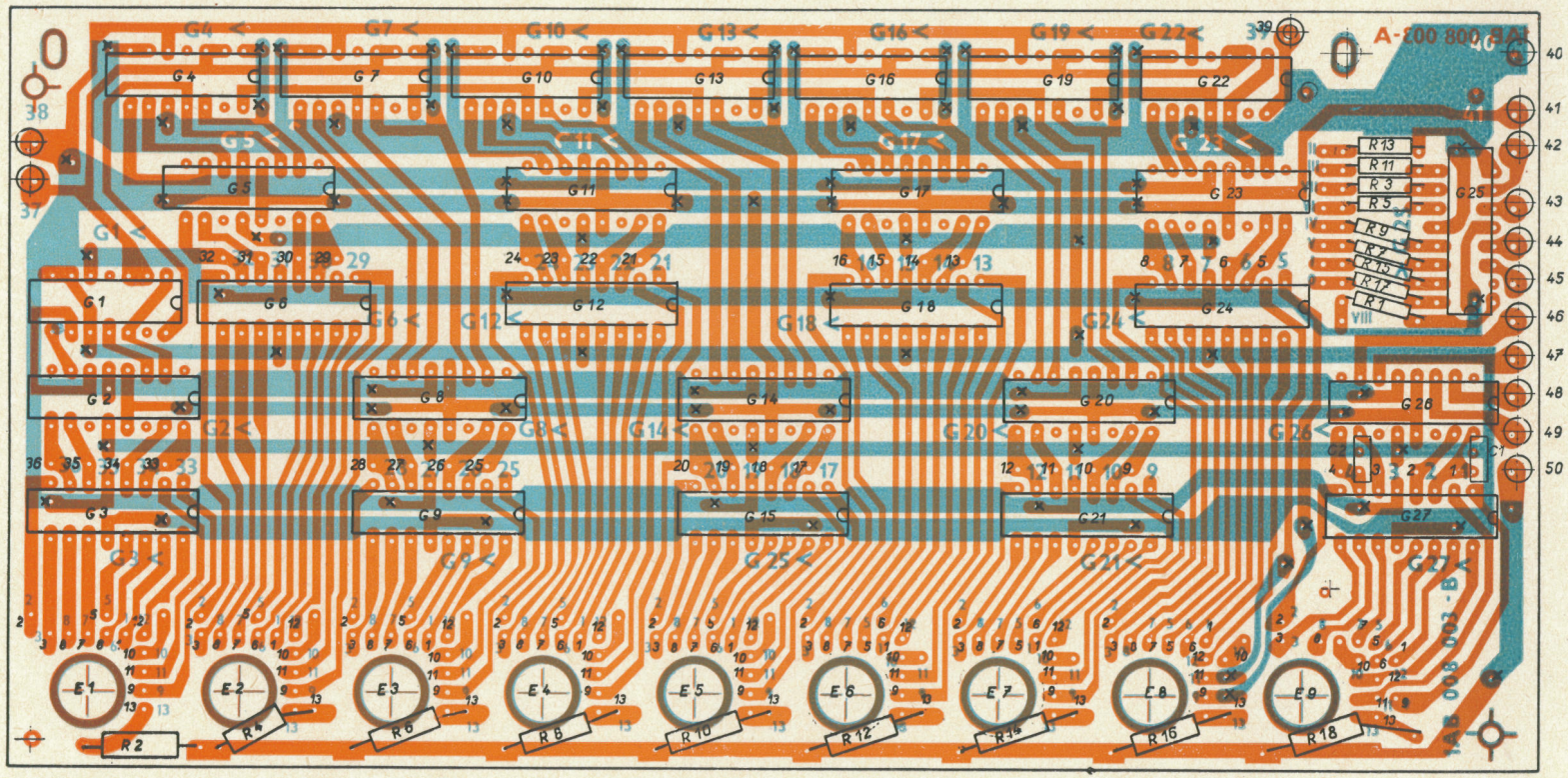
BM 526/15



Dekáda 100 MHz D100
Декада 100 МГц D100
Decade 100 MHz D100

1AF 004 07

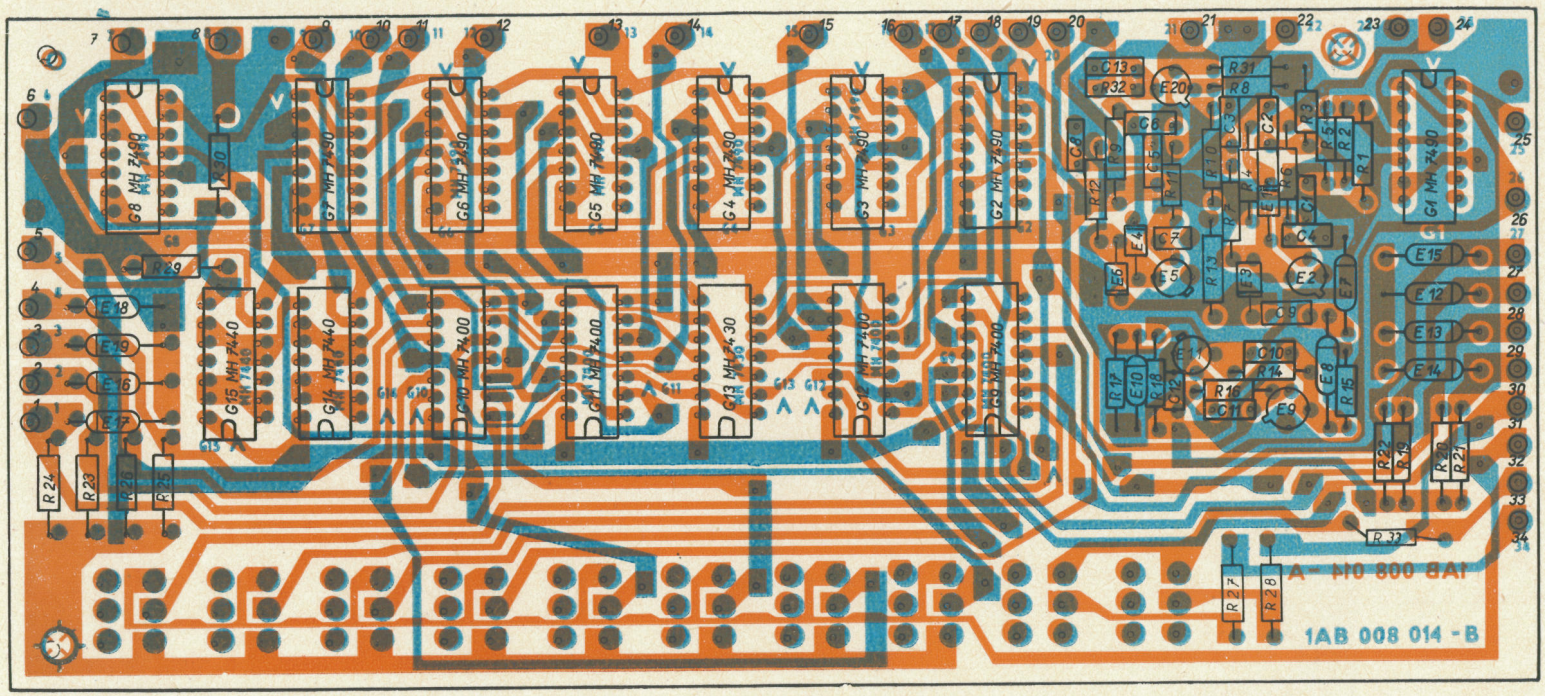
BM 526/16



Jednotka počítacích dekád JPD
Блок счетных декад JPD
Unit of counter decades JPD

1AF 008 00

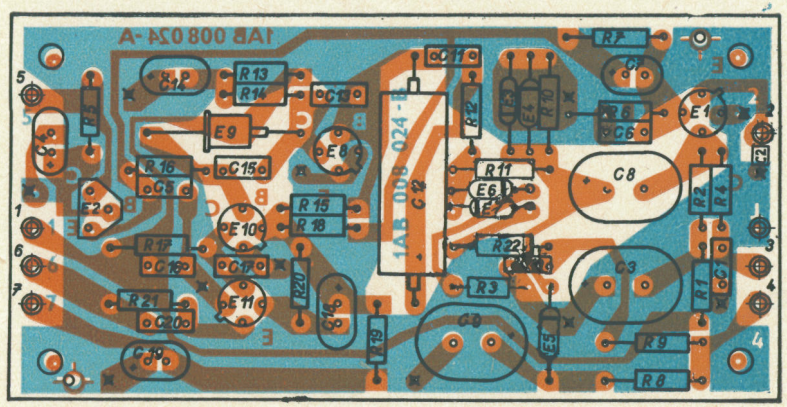
BM 526/17



Jednotka časové základny JČZ
Блок генератора импульсов времени JČZ
Unit of time base JČZ

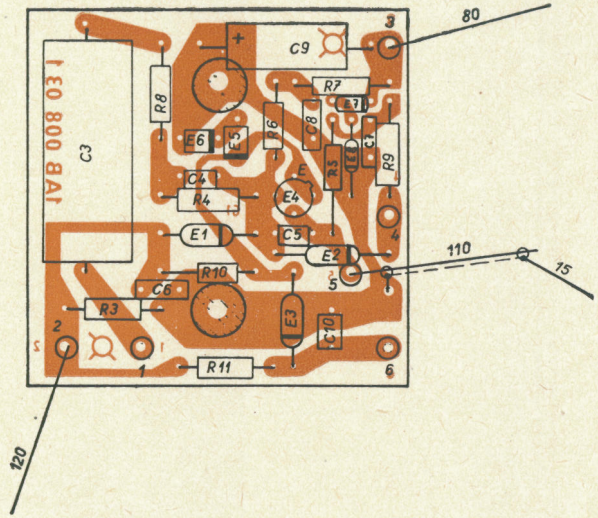
1AF 008 01

BM 526/18



Předzesilovač
Предварительный усилитель
Preamplifier

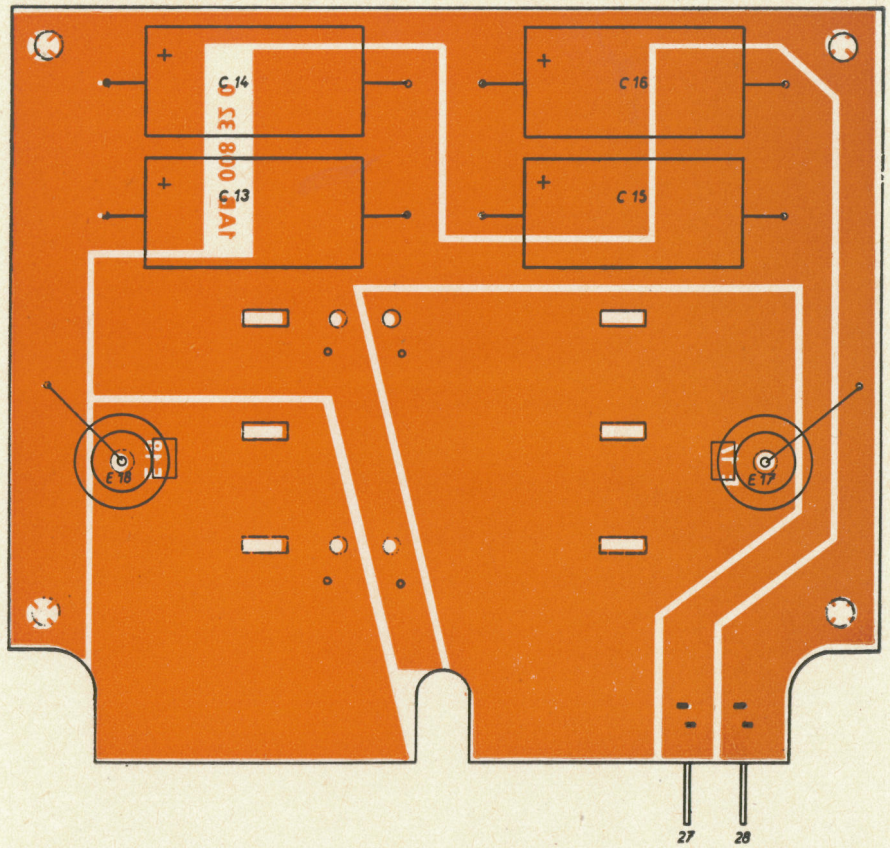
1AF 008 02



Vstupní jednotka
Входной блок
Input unit

1AF 008 03

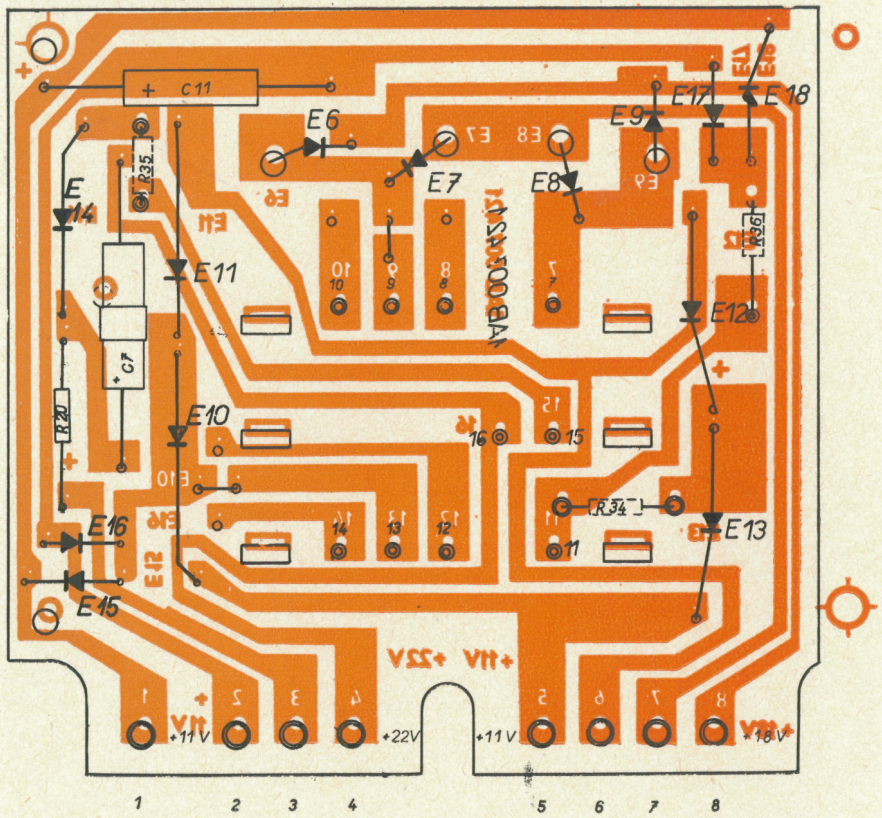
BM 526/19



Montážní jednotka
Монтажный блок
Mounting unit

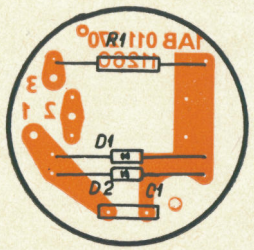
1AF 008 32

BM 526/20



Napáječ
Источник питания
Power supply

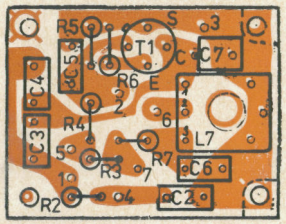
1AN 290 64



Obvod krystalu
Цепь кварца
Crystal circuit

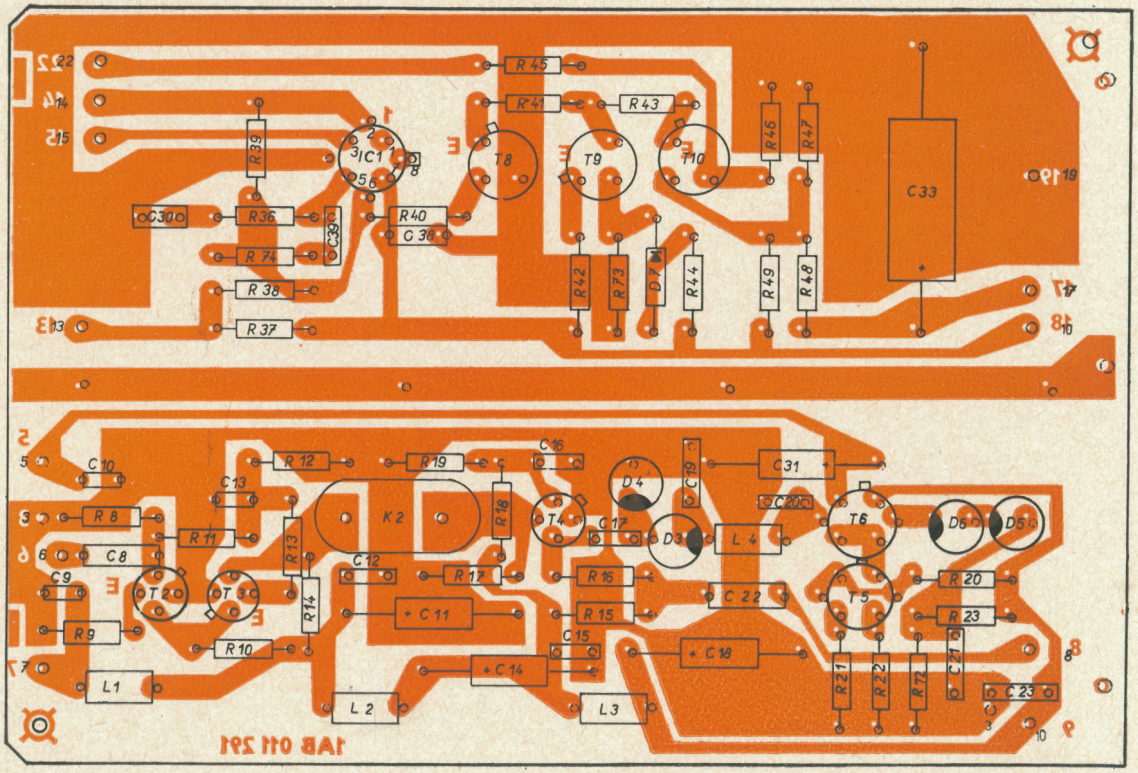
1AF 011 27

BM 526/21



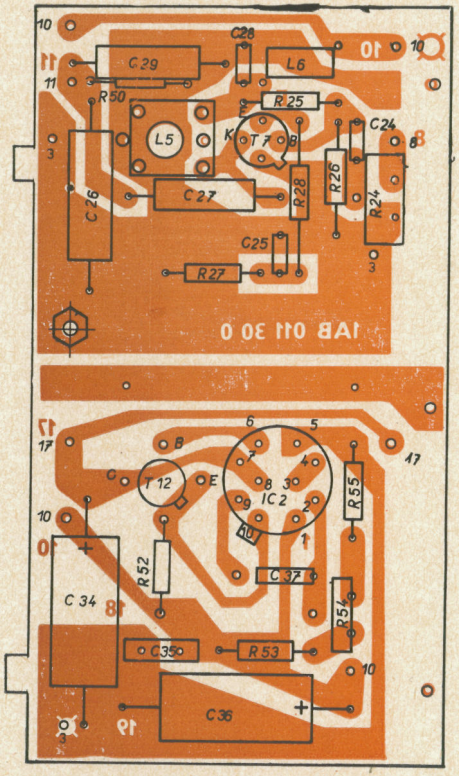
Oscilátor
Автогенератор
Oscillator

1AF 011 28

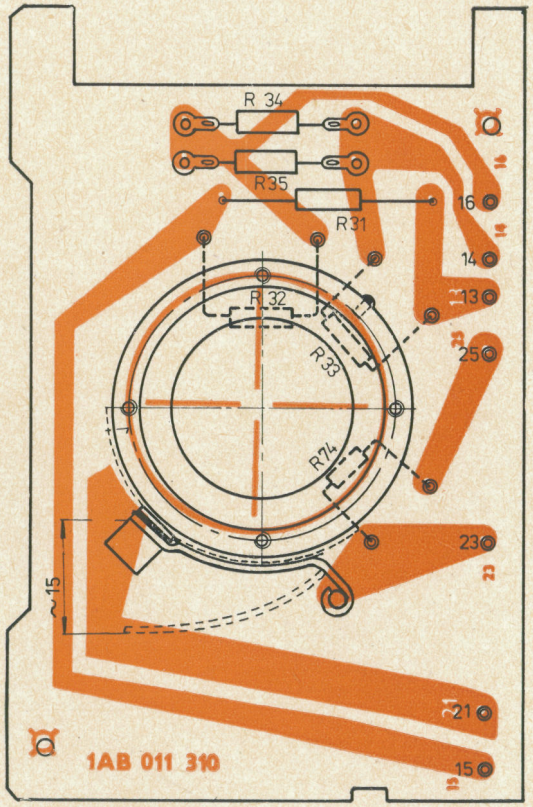


Stabilizační smyčka a termoregulátor
Петля стабилизации и терморегулятор
Stabilizing loop and thermoregulator

1AF 011 29

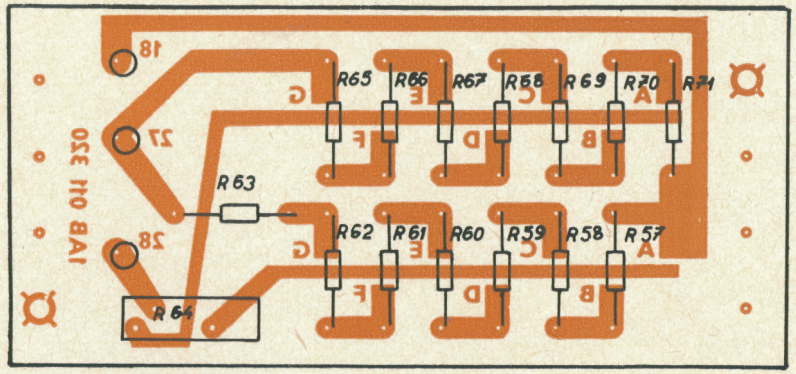


Oddělovací stupeň a stabilizátor **1AF 011 30**
Буфферный каскад и стабилизатор
Buffer stage and stabilizer



Most a obvod topení **1AF 011 31**
Мост и цепь нагрева
Bridge and heating circuit

BM 526/23



Nastavení kmitočtu
Установка частоты
Frequency setting

1AF 011 32

S1 S2 S3 S4

JSI/17 JSI/12 JSI/4 RJ/19 JSI/19 JSV 8 RJ/7

VNĚJŠÍ NORMÁL K2 C6 100 N10/20 S7

PAMĚŤ +5V JPD/A1 JSI/6 S8

TERMOSTAT Ž1 C7 M1 +12V

D.II

JPF/22 JPF/10 JPF/7 +12V -12V JVI/24 JVI/16 JCZ/13 JVI/20 JPF/12 JOH/13 SB/12a +5V 295V

D.I

N10/10 JOH/18 JOH/22 JCZ/8 RJ/14 JPF/28

KMITOČTOVÝ NORMÁL 5 MHZ 1AN 280 81

PROPOJENÍ VÝSTUPNÍCH ZÁSUVEK

	I	I	II	II
1	JPD/1	JPD/29	JPF/3	JSI/3
2	JPD/3	JPD/31	JPF/2	JSI/3
3	JPD/4	JPD/32	JPF/5	JSI/9
4	JPD/2	JPD/30	JPF/4	JSI/20
5	JPD/5	JPD/33	JPF/17	JSI/22
6	JPD/7	JPD/35	JPF/16	JSI/5
7	JPD/8	JPD/36	JCZ/28	
8	JPD/6	JPD/34	JCZ/29	
9	JPD/9	DII/18	JCZ/30	
10	JPD/11	DII/19	JCZ/27	
11	JPD/12	DII/17	JCZ/2	
12	JPD/10	DII/16	JCZ/1	
13	JPD/13	JVI/13	JCZ/4	
14	JPD/15	JVI/9	JCZ/3	
15	JPD/16	JVI/8		
16	JPD/14	JVI/11		
17	JPD/17	⊥		
18	JPD/19	+5V		
19	JPD/20	JVI/29		
20	JPD/18	⊥		
21	JPD/21	JVI/29		
22	JPD/23	+5V		
23	JPD/24	+5V		
24	JPD/22	⊥		
25	JPD/25	JVI/14		
26	JPD/27	⊥		
27	JPD/28	⊥		
28	JPD/26	⊥		
29	⊥	⊥	⊥	
30	⊥	⊥	⊥	
31	⊥	⊥	⊥	
32	⊥	⊥	⊥	

+5V 1 2 3 4 5 6 7 8 9 10 +12V

ST1 STABILIZÁTOR 1AF 007 50.

ST2 STABILIZÁTOR 1AF 007 49

+12V 1 2 3 4 5 6 7 8 9 10 -12V

+120V 20M C7 +295V

NAPAJEČ 1AN 290 63 ST2/2 ST2/7 ST1/7 27 28 ST1/4 ST1/1

NAPAJEČ 1AN 290 62 1 2 3 4 5 6 7 8 9 10 11 12 13 ST1/1

ZESILOVAČ A1 1AF 007 97

+12V L1 A2/7 C1 20M M1 C2 A2/18 -12V M1 C3 C4 6µ8 JVI/28 JVI/29 C5 M1 C11

ZESILOVAČ A2 1AF 007 98 -12V +12V

N 100 1AF 007 79

JSIF 1AF 007 76 +5V

N 10 1AF 007 95

JVI 1AF 007 61 R5 680 R4 3K3

RJ 1AF 007 75 C15 M1 R7 6K8 C16 M1 R8 C17 S6

D 100 1AF 004 07

JEDNOTKA MONTÁŽNÍ 1AF 007 96

JVI/A2 JVI/18 JVI/32 JVI/17 JVI/19 RJ/15 +120V R9 D4 QUH

JPF/29 A1/4 +12V JVI/34 JVI/21 JVI/32 JVI/35 JVI/26 JVI/23 JVI/25 JVI/30 JOH/20

N10/2 RJ/14 JOH/5 JOH/6

JEDNOTKA ČASOVÉ ZÁKLADNY 1AF 008 01.

+5V K3 VÝSTUP f_n

PŘEDZESILOVAČ 1AF 008 02

A1/18 A1/21 A2/13 A2/4 +120V A2/8 A2/19 A2/11 A2/9

ARC S5 1:1 1:100 D1 D2 D3 A2/2 R6 47K A2/4 A2/6 A2/5

-12V A1/12 VSTUPNÍ JEDNOTKA 1AF 655 03 A1/6 +12V

JEDNOTKA POČÍTACÍCH DEKÁD 1AF 008 00

JVI/27 JVI/3 JVI/10 JVI/4 D100/3 D100/4 D100/44 D100/2 +295V

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 +5V JCZ/26

INDIKACE RJ/15 RJ/17 R3 M1 RJ/18

SMĚR STLAČENÍ

S6 K1 R1 120 R2 120

+5V +12V K4 JCZ/34 JVI/20 JVI/16 JVI/22 JCZ/24 N100/4 JOH/11

JCZ/8 JVI/24 N10/7 N100/6 JCZ/20 A2/15 JVI/29 RJ/19

JEDNOTKA PŘEPÍNAČE FUNKCÍ 1AF 007 60.

VÝZNAM SYMBOLŮ

+12V +5V +12V — Propojeno na stabilizátor 1AF 007 49 – Подключено к стабилизатору – Interconnected with stabilizer

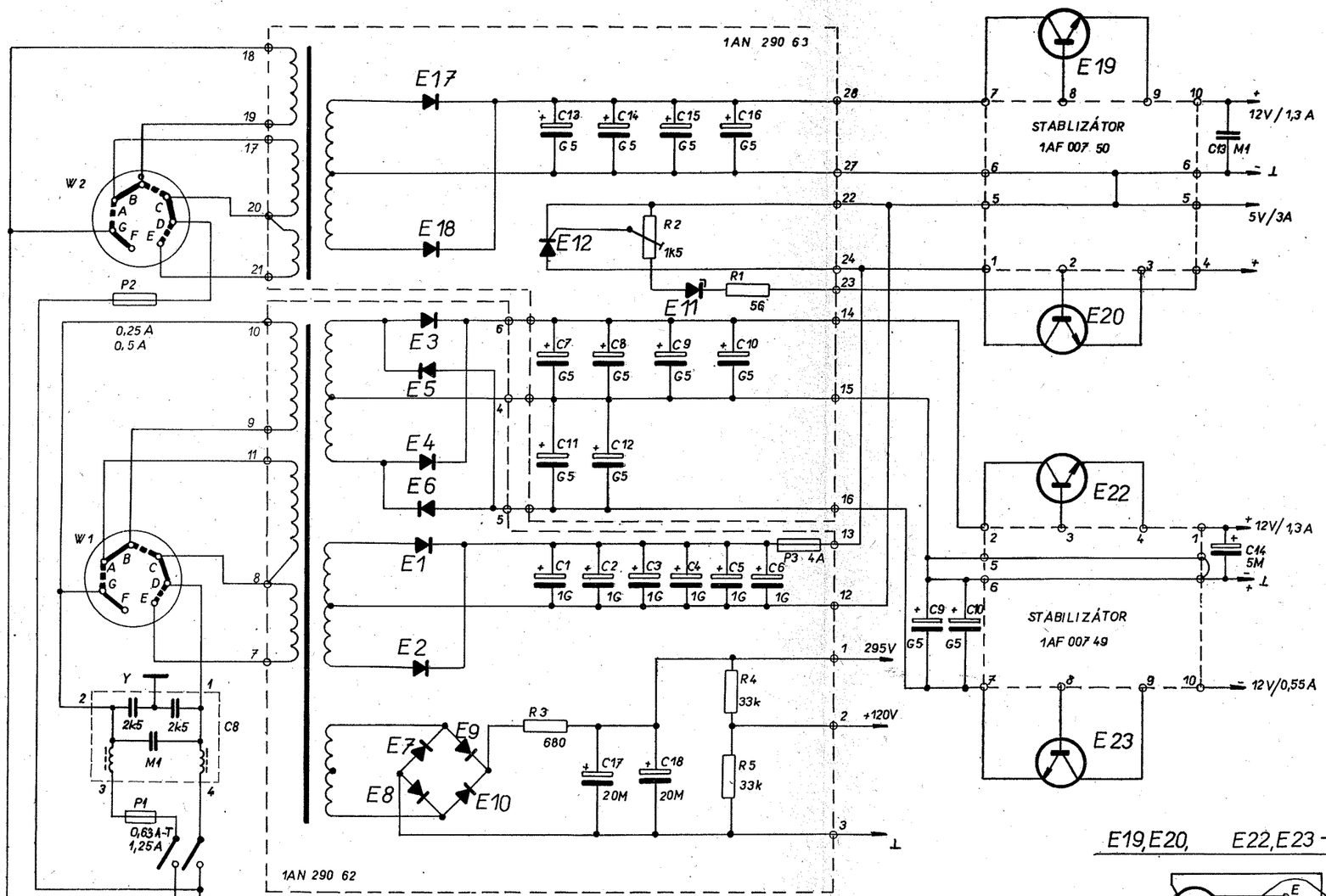
Propojeno na stabilizátor 1AF 007 50 – Подключено к стабилизатору – Interconnected with stabilizer

ZEMĚNÍ NA KOSTRU.

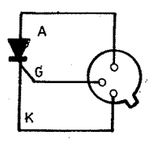
Schéma univerzálního čítače BM 526
Схема универсального счетчика BM 526
Diagram of BM 526 universal counter

1X1 832 57

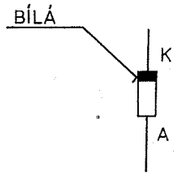
BM 526/25



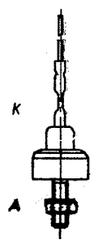
E12 - KT 501



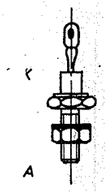
E7, E8, E9, E10 - KY 130/600



E3, E4, E5, E6, E17, E18 - KY 721 F



E1, E2 - KY 708



E19, E20, E22, E23 - KD 605

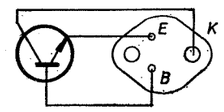
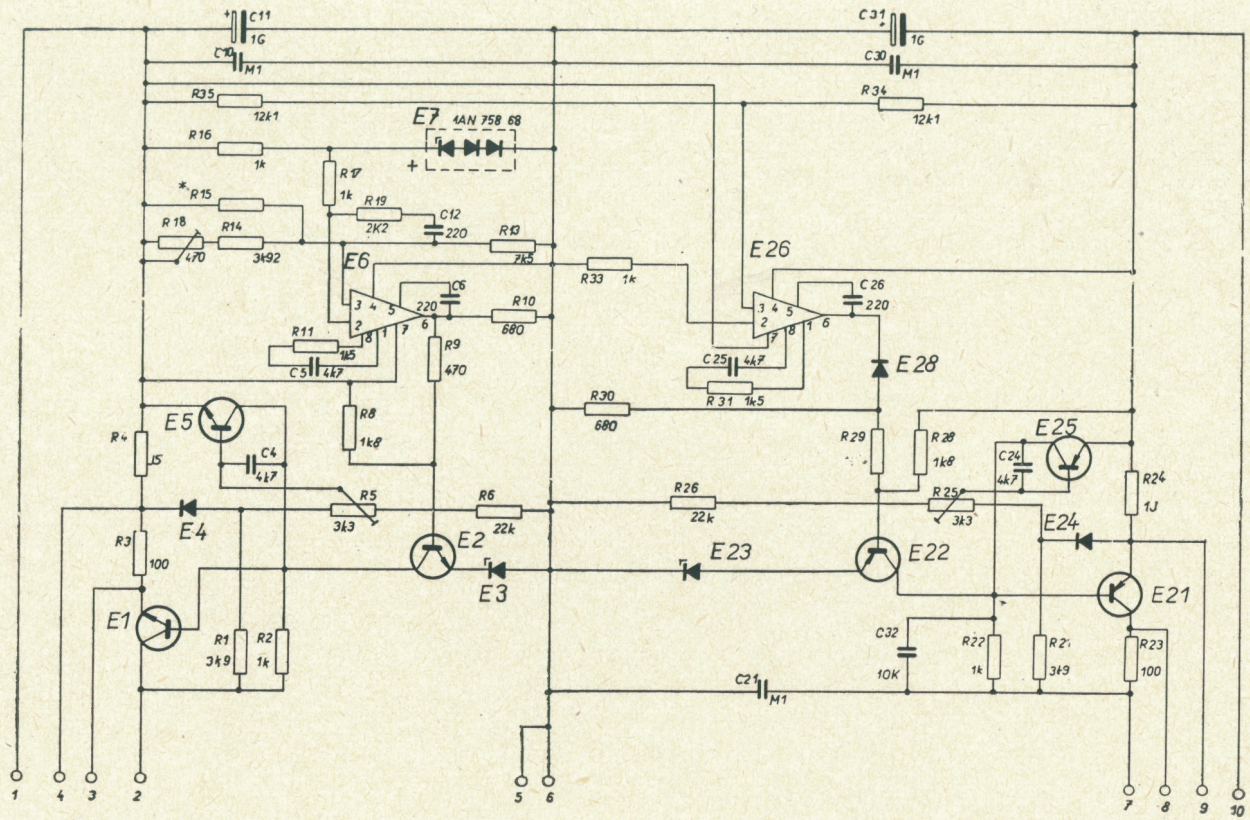
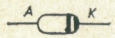


Schéma napáječů BM 526
Схема источников питания BM 526
Diagram of BM 526 supplies



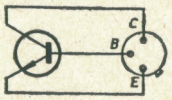
E4,E24

E28

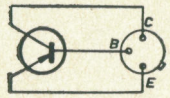


E6,E26

E1,E2
E5



E21,E22
E25



E3,E23

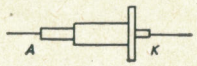
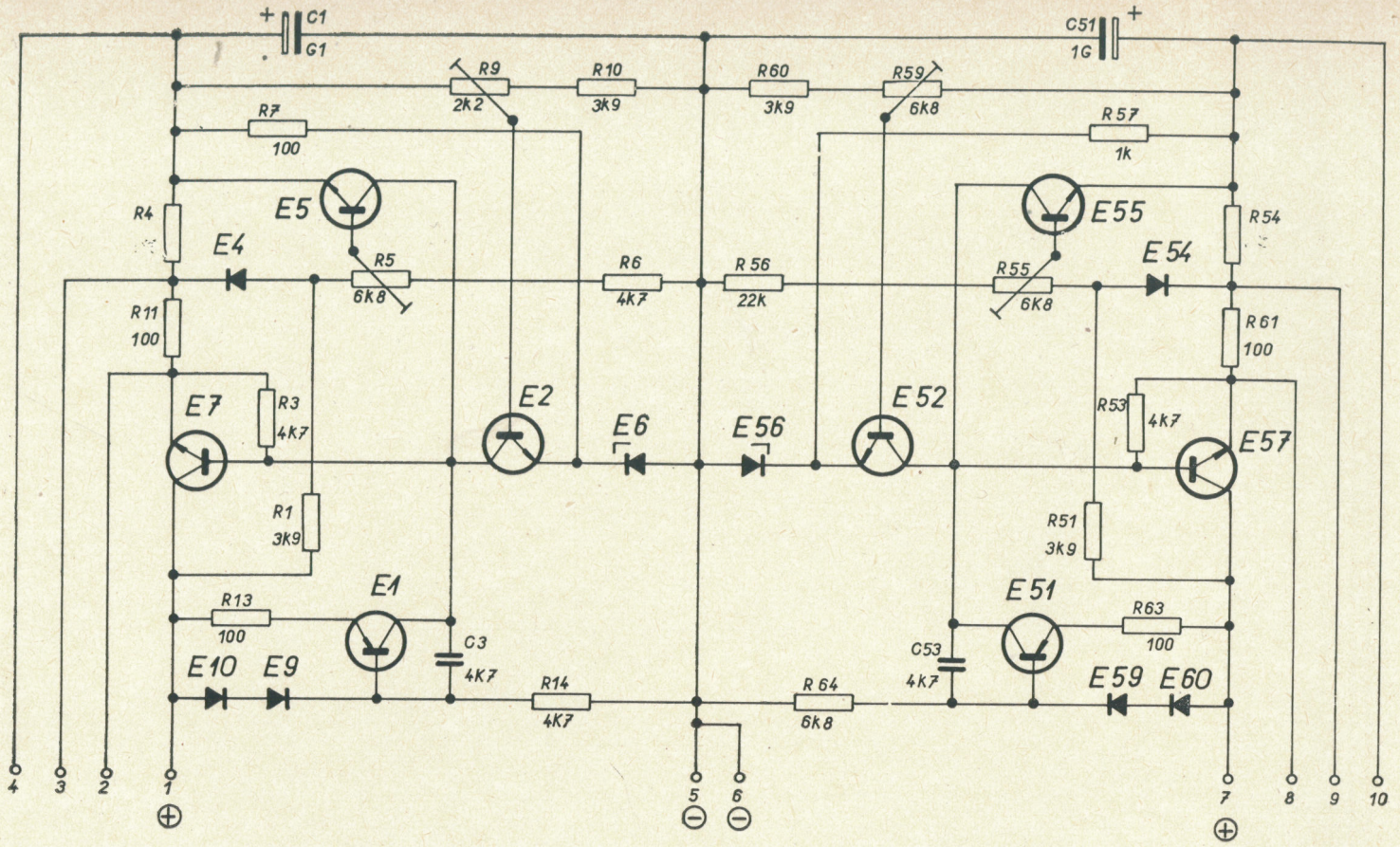


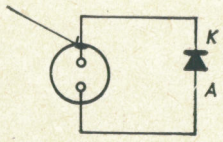
Schéma stabilizátoru ST2
Схема стабилизатора ST2
Diagram of stabilizer ST2

1AF 007 49

BM 526/27

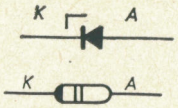


E4,E5 - GAZ 51

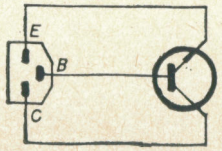


E56-KZZ 71

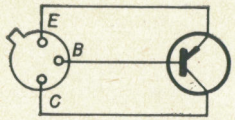
E6 - KZ 140



E2,E52 - KC 147

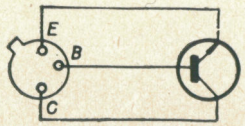


E1,E51 - KFY 18



E5, E55 - KFY 34

E7,E57 - KFY 46



E9,E10,E59,E60 - KA261

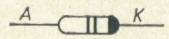
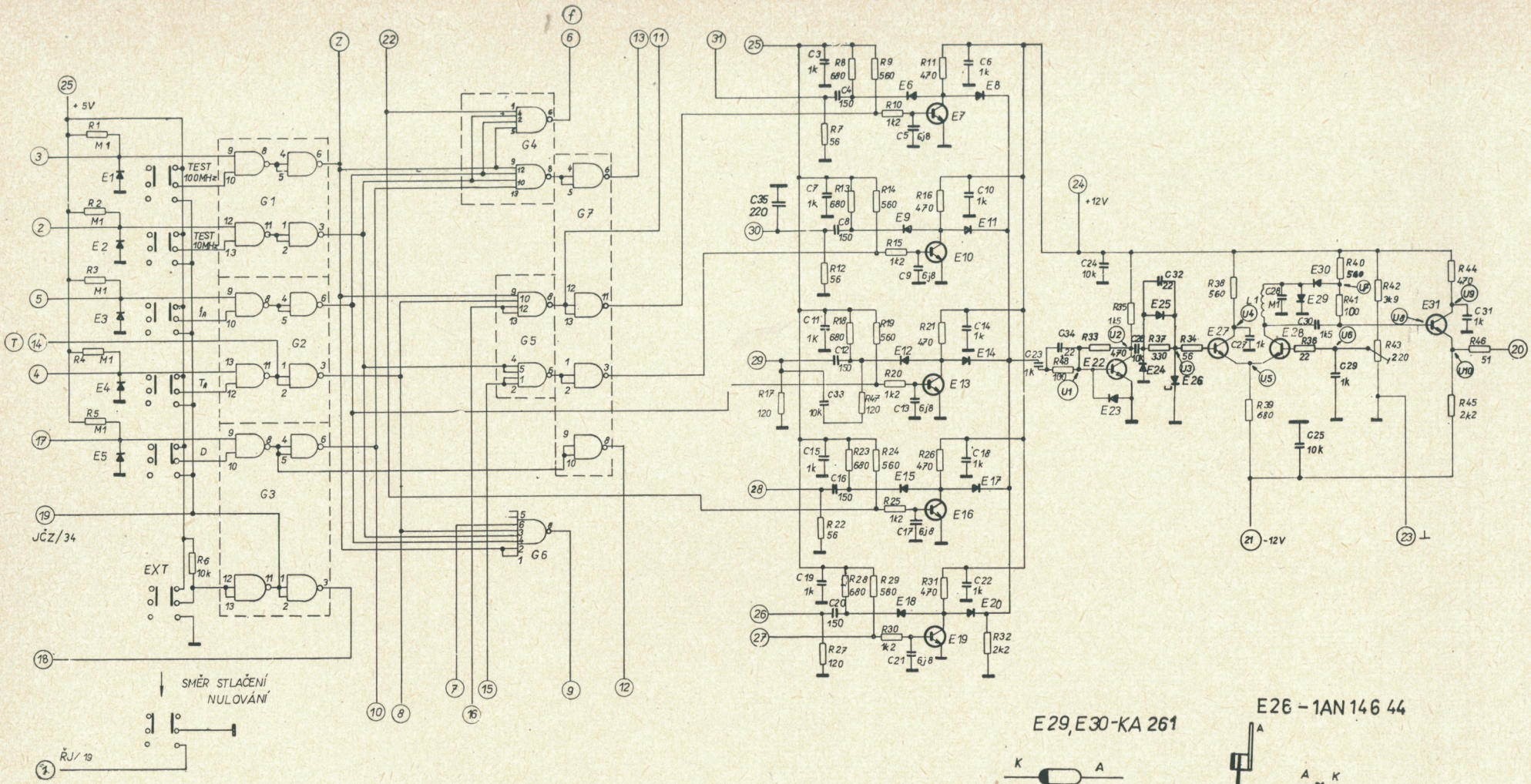


Schéma stabilizátoru ST1
Схема стабилизатора ST1
Diagram of stabilizer ST1

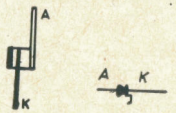
1AF 007 50

BM 526/28



E29, E30 - KA 261

E26 - 1AN 146 44

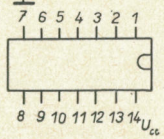


E6, E8, E9, E11, E12, E14, E15,
E17, E18, E20 - KA 136

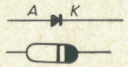
E1, E2, E3, E4, E5, E23, E24, E25 - KA206

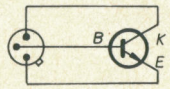
E7, E10, E13, E16, E19
E22, E27, E28, E31 - KSY 71

G1, G2, G3, G7 MH7400
G4, G5 MH7420
G6 MH7430



POHLED NA POUZDRO SHORA



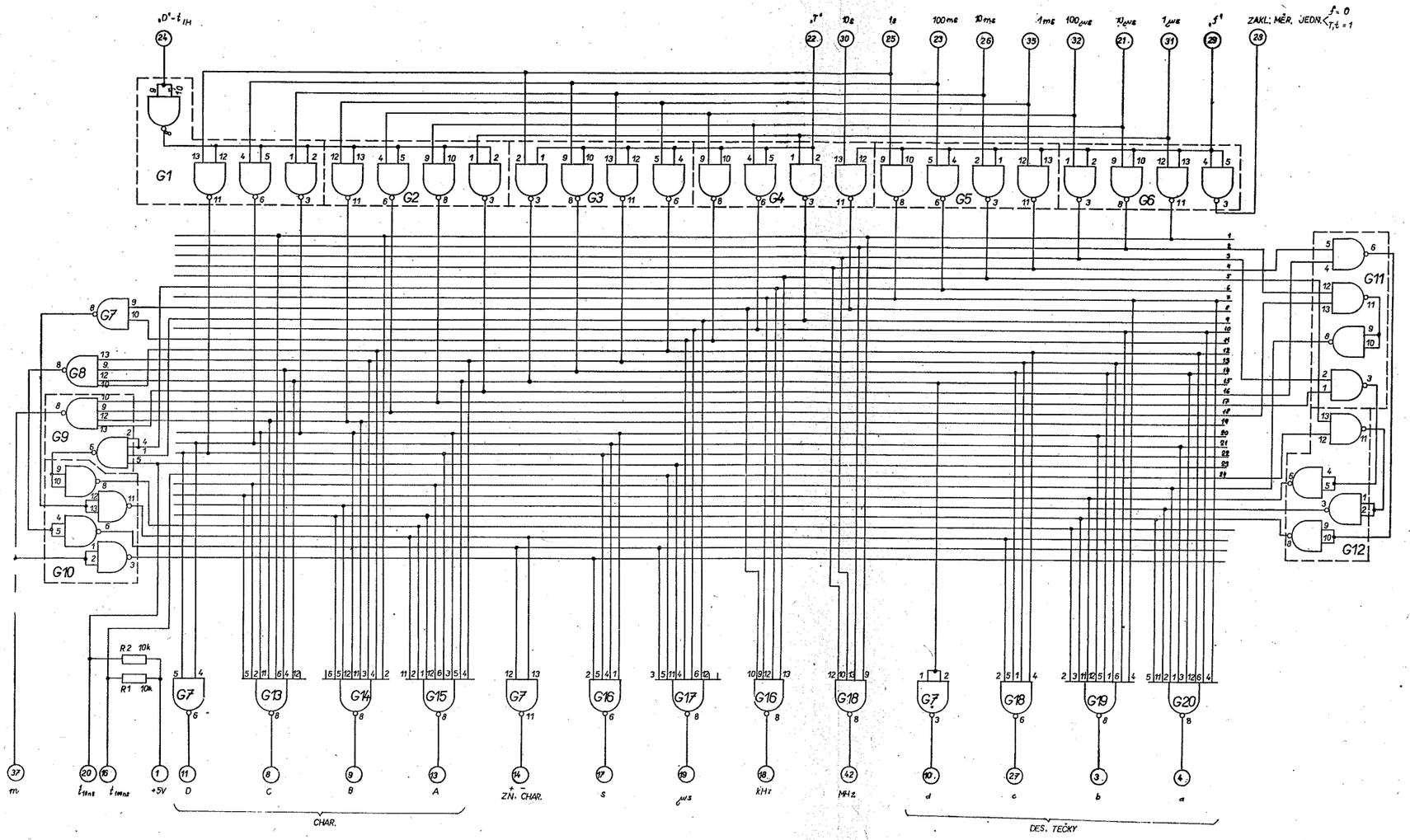


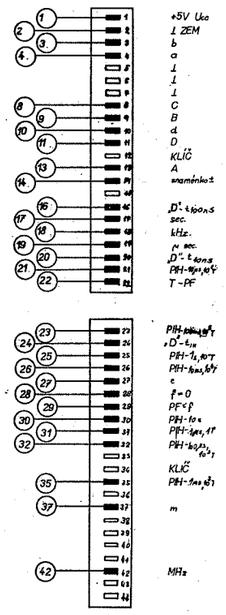
NULOVÁNÍ - ЗАНУЛЕНИЕ – RESET

Schéma jednotky přepínače funkcí JPF
Схема блока переключателя режимов работы JPF
Diagram of the unit of mode selector JPF

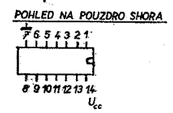
1AF 007 60

BM 526/29





G1,G2,G3,G4,G5,G6,G7, G10,G11,G12 — MH 7400
G8,G9,G16,G17 — MH 7020
G13,G14,G15,G17,G19,G20 — MH 7030



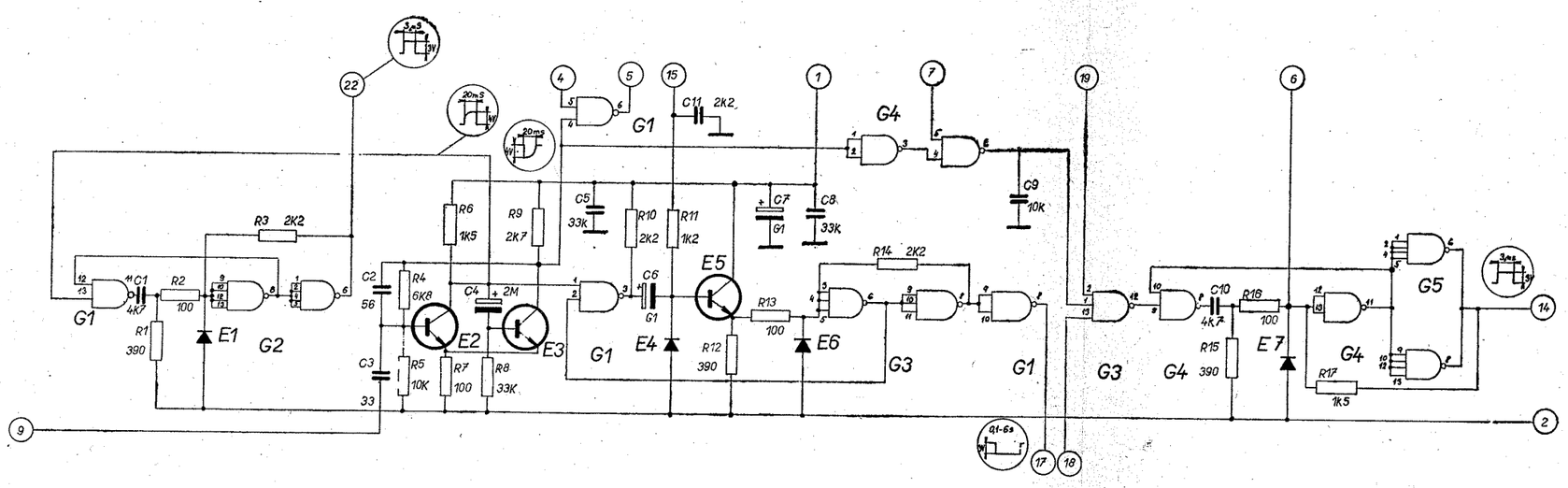
Zapojení zásuvky
Включение гнезда
Connection of the socket

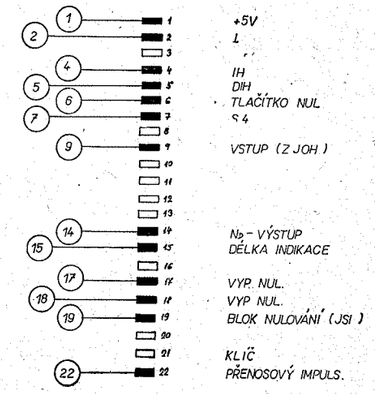
1 — +5 V U_{CC}
2 — zem - земля — Earth
3 — b
4 — a
5—7 — zem - земля — Earth
8 — C
9 — B
10 — d
11 — D
12 — klíč - ключ — Key
13 — A
14 — znaménko ± - знак ± — Sign ±
16 — „D" — $t_{100\ ns}$
17 — s
18 — kHz
19 — μs
20 — „D" — $t_{10\ ns}$
21 — PIH — 10 μs, 10^1 T
22 — T — PF
23 — PIH — 100 ns, 10^5 T
24 — „D" — t_{1H}
25 — PIH — 1 s, 10^6 T
26 — PIH — 10 ms, 10^4 T
27 — c
28 — f = 0
29 — PF — f
30 — PIH — 10 s
31 — PIH — 1 μs, 1 T
32 — PIH 100 μs, 10^3 T
34 — klíč - ключ — Key
35 — PIH — 1 ms, 10^3 T
37 — m
42 — MHz

Schéma jednotky výstupních informací JVI
Схема блока выходных информаций JVI
Diagram of the unit of output information JVI

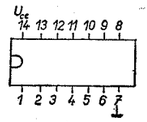
1AF 007 61

BM 526/30

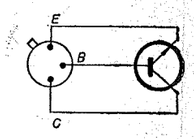




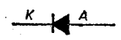
G1,G4 - MH 7400
G2,G5 - MH 7440
G3 - MH 7410



E2,E3 - KSY 62B



E1,E4,E6,E7 - KA 206



E5 - KC 147

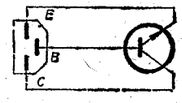
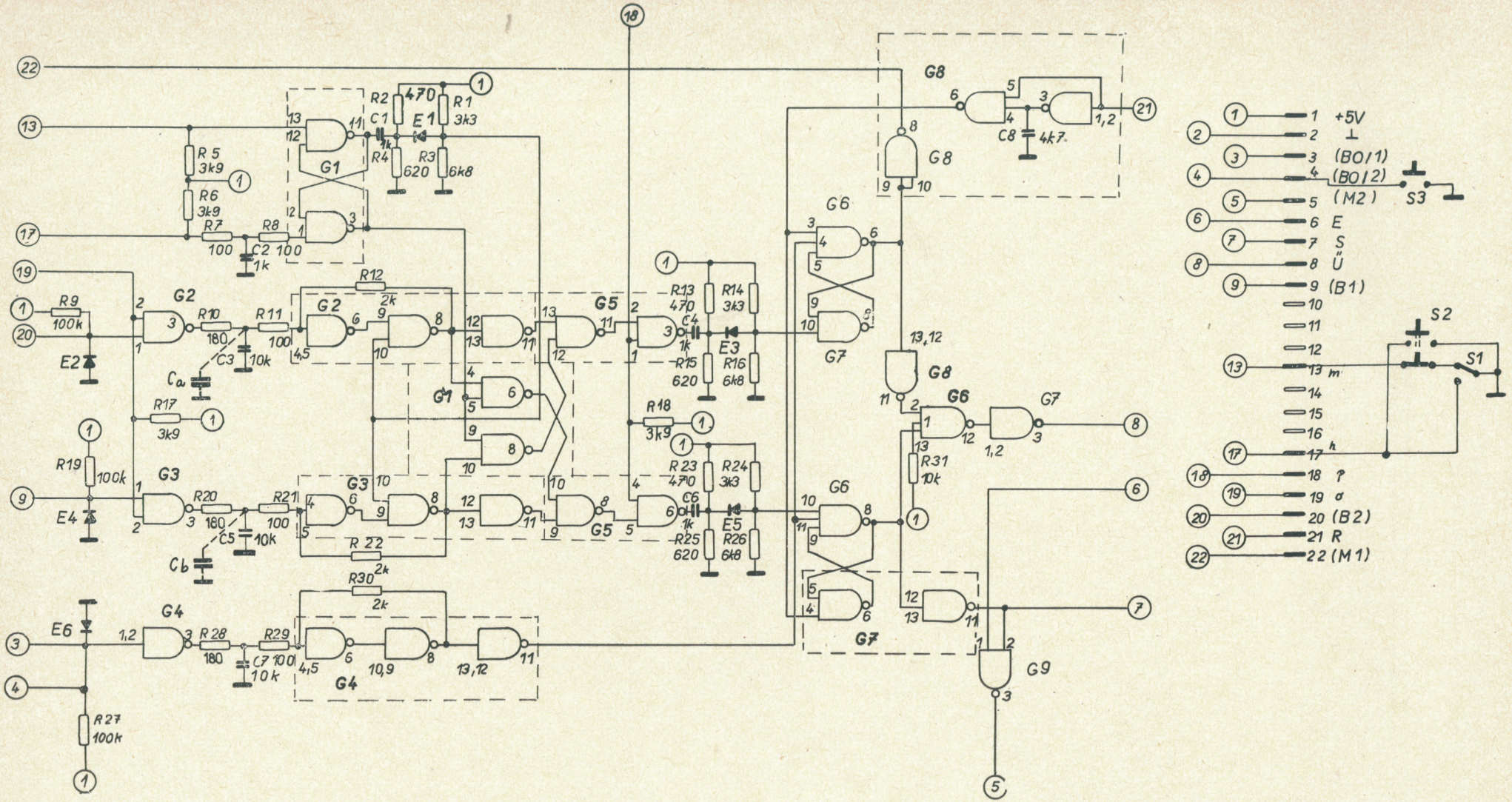


Schéma řídicí jednotky ŘJ
Схема управляющего блока ŘJ
Diagram of the control unit ŘJ

TLAČÍTKO NUL.	- КНОПКА ЗАНУЛЕНИЯ	— PUSH-BUTTON FOR ZEROIZING
VSTUP (z JOH)	- ВХОД (от JOH)	— INPUT (from GCU)
N_D - VÝSTUP	- ВЫХОД	— OUTPUT
DÉLKA INDIKACE	- ДЛИТЕЛЬНОСТЬ ИНДИКАЦИИ	— INDICATION LENGTH
VYP. NUL	- ВЫКЛЮЧЕНИЕ ЗАНУЛЕНИЯ	— ZEROIZING OFF
BLOK. NULOVÁNÍ	- БЛОКИРОВКА ЗАНУЛЕНИЯ	— BLOCKING OF ZEROIZING
KLÍČ	- КЛЮЧ	— KEY
PŘENOSOVÝ IMPULS	- ИМПУЛЬС ПЕРЕДАЧИ	— TRANSMISSION PULSE

1AF 007 75

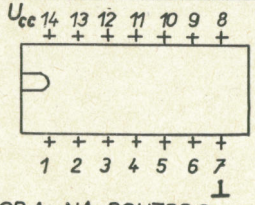
BM 526/31



E1, E2, E3, E4, E5, E6 - KA 206

G1, G2, G3, G4, G5, G7, G8, G9 - MH 7400

G6 - MH 7410

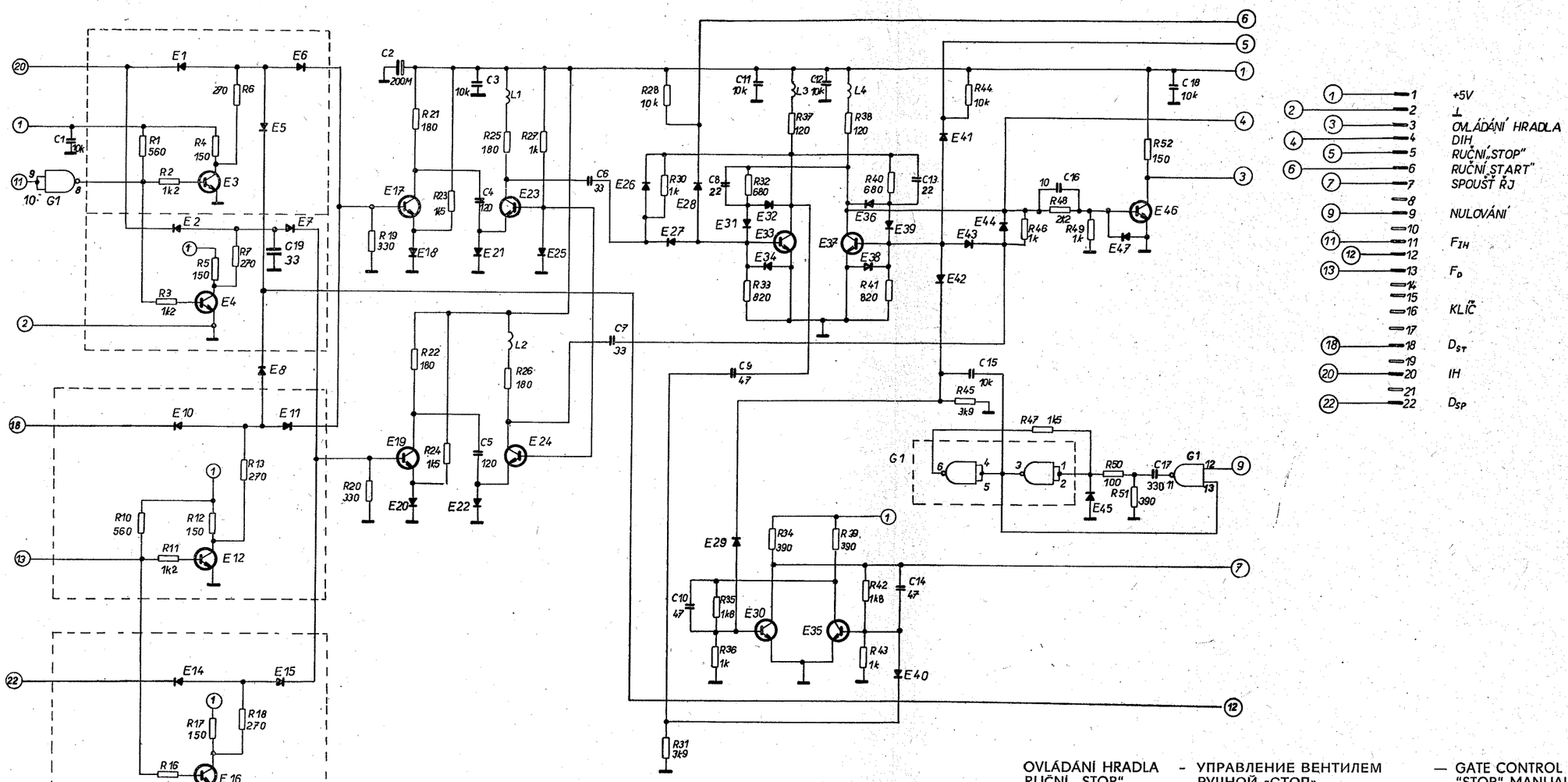


POHLED SHORA NA POUZDRO

Schéma jednotky Standard Interface JSI
Схема блока "Standard Interface" JSI
Diagram of the unit of standard interface JSI

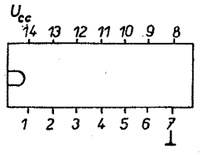
1AF 007 76

BM 526/32



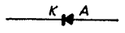
OVLÁDÁNÍ HRADLA	- УПРАВЛЕНИЕ ВЕНТИЛЕМ	— GATE CONTROL
RUČNÍ „STOP"	- РУЧНОЙ «СТОП»	— "STOP" MANUAL
RUČNÍ „START"	- РУЧНОЙ «СТАРТ»	— "START" MANUAL
SPOUŠŤ ŘJ	- ПУСК УПРАВЛЯЮЩЕГО БЛОКА	— TRIGGERING OF CONTROL UNIT
NULOVÁNÍ	- ЗАНУЛЕНИЕ	— ZEROIZING
KLÍČ	- КЛЮЧ	— KEY

G 1 - MH 7400



POHLED NA POUZDRO SHORA

E1,E2,E5,E6,E7,E8,E10,E11,E14,E15
E18,E20,E21,E22,E25,E27,E28,E29,E31,E32
E34,E36,E38,E39,E40,E41,E42,E43,E44,E45,E47 - KA 223



E17,E19,E46 - 1AN 114 14 (KSY 71)
E33,E37 - 1AN 114 13 (KSY 71)
E3,E4,E12,E16,E23
E24,E30,E35 - KSY 71

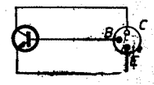
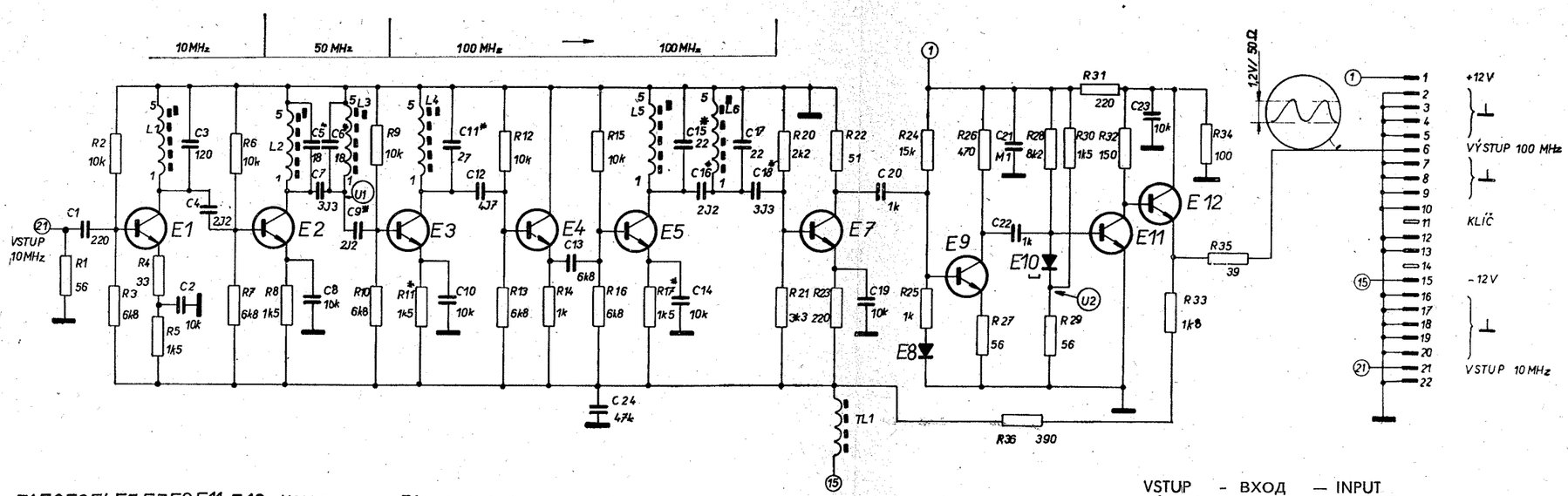


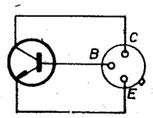
Schéma jednotky ovládání hradla JOH
Схема блока управления вентилем JOH
Diagram of the unit of gate control JOH

1AF 007 78

BM 526/33



E1,E2,E3,E4,E5,E7,E9,E11,E12 – KSY 71



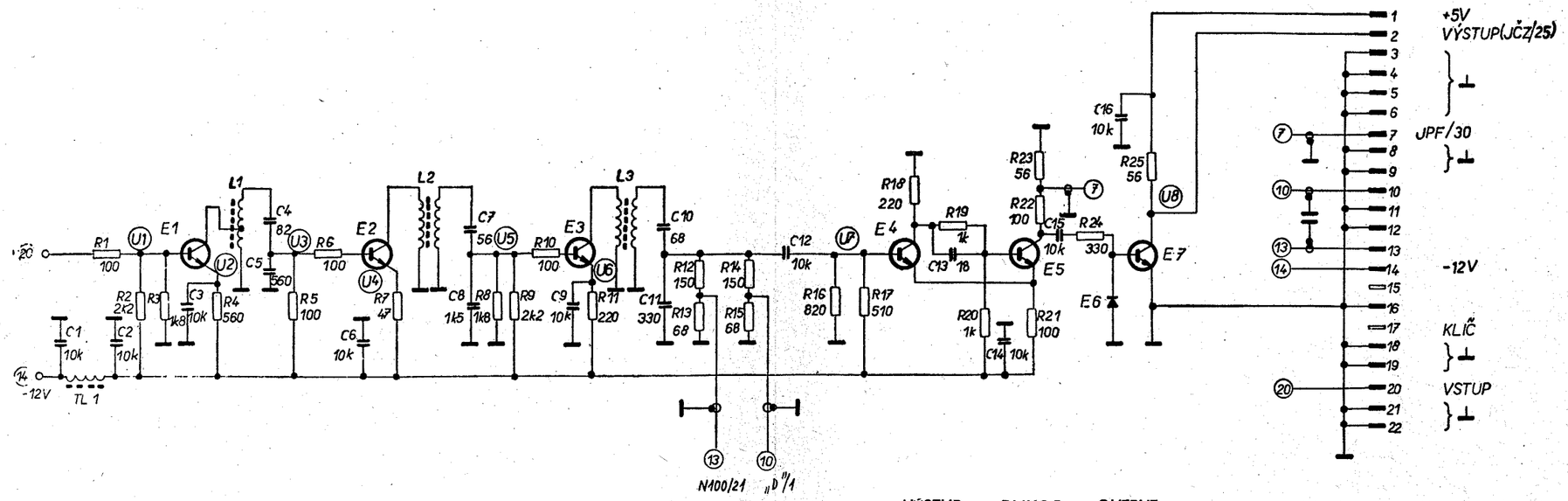
E10 - 1AN 14643 (ГИ 304А)

VSTUP - ВХОД — INPUT
VÝSTUP - ВЫХОД — OUTPUT
KLÍČ - КЛЮЧ — KEY

Schéma násobiče 100 MHz N100
Схема умножителя 100 МГц N100
Diagram of the multiplier 100 MHz N100

1AF 007 79

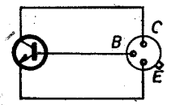
BM 526/34



VÝSTUP - ВЫХОД — OUTPUT
KLÍČ - КЛЮЧ — KEY
VSTUP - ВХОД — INPUT

E1,E2,E3,E4,E5 - KSY 71

E7 - KSY 21



E6 - KA 206

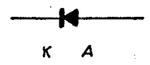


Schéma násobiče 10 MHz N10
Схема умножителя 10 МГц N10
Diagram of the multiplier 10 MHz N10

1AF 007 95

BM 526/35

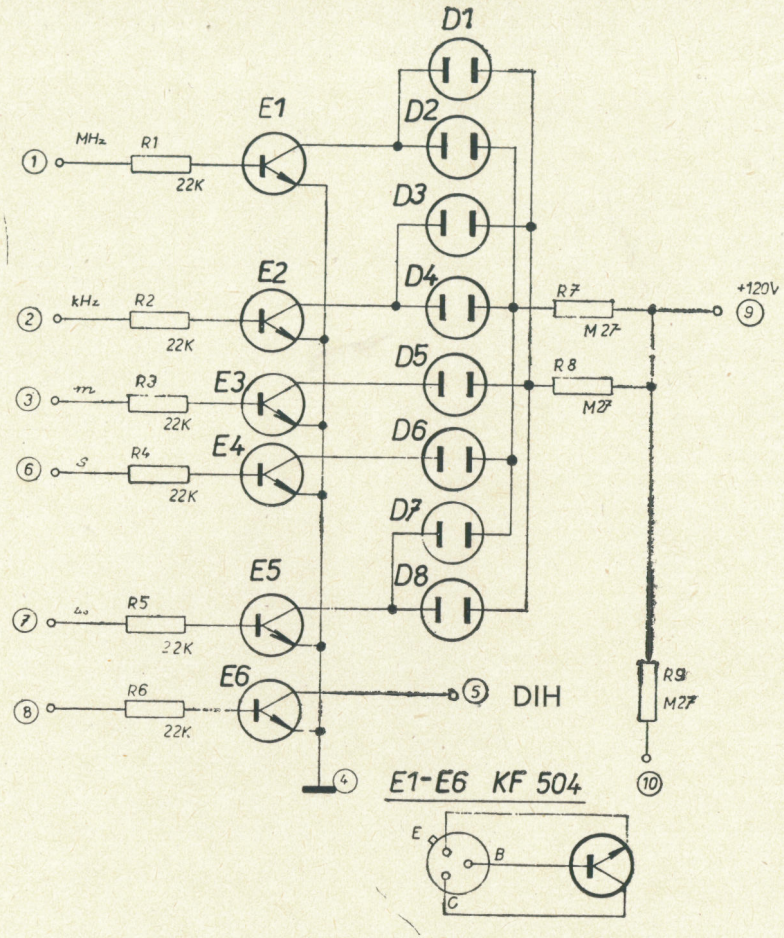
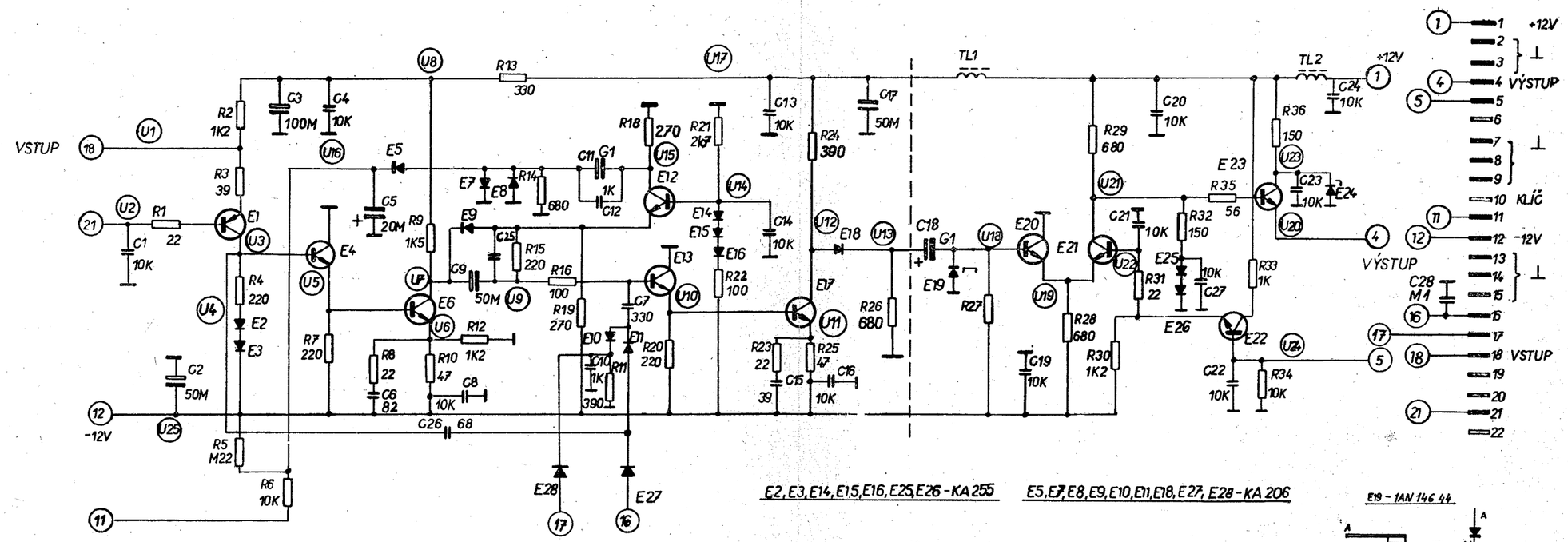


Schéma jednotky znaků
Схема блока знаков
Diagram of the unit of symbols

1AF 007 96

BM 526/36

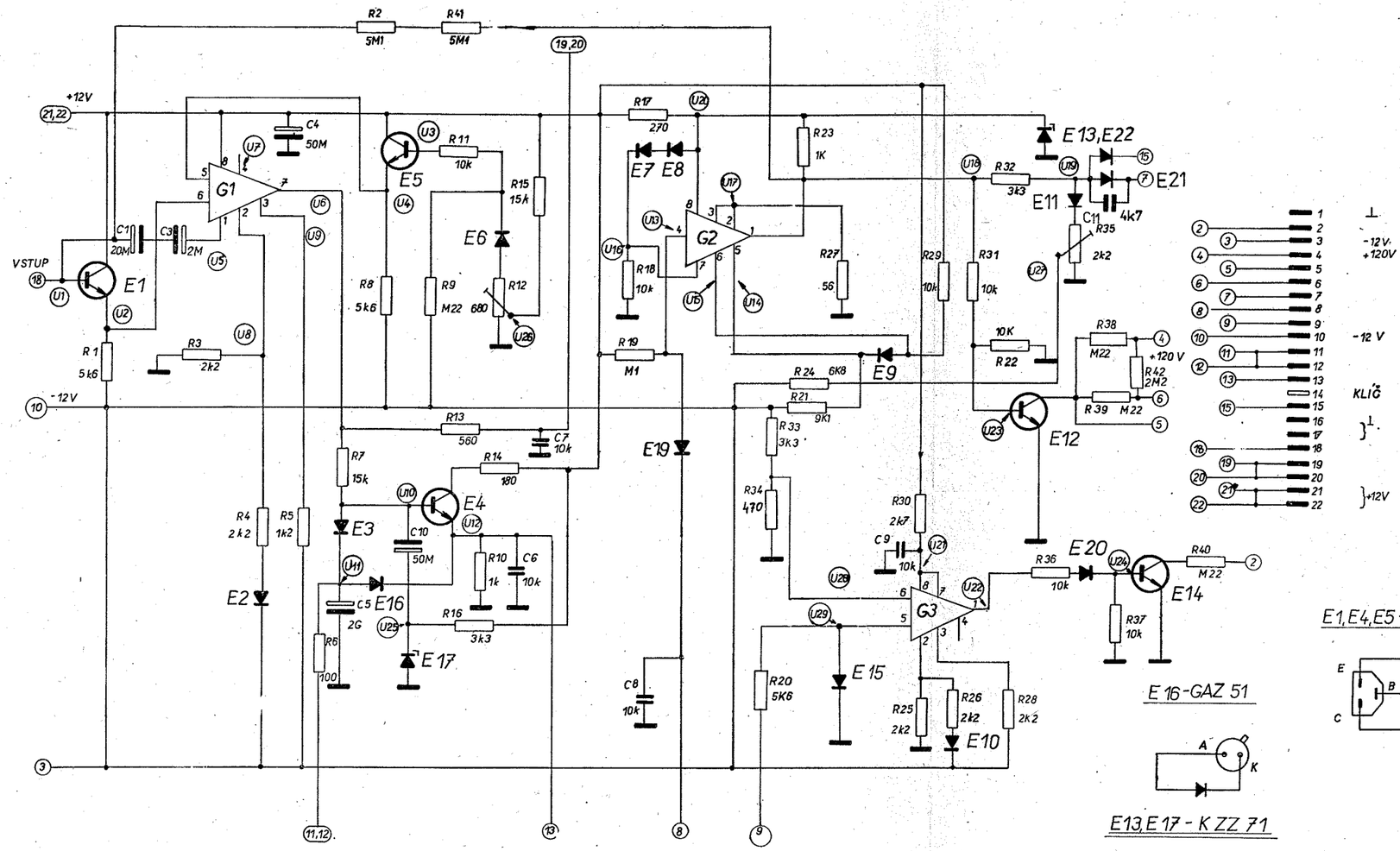


VSTUP - ВХОД — INPUT
VÝSTUP - ВЫХОД — OUTPUT
KLÍČ - КЛЮЧ — KEY

Schéma zesilovače A1
Схема усилителя A1
Diagram of the amplifier A1

1AF 007 97

BM 526/37

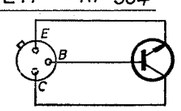


VSTUP - ВХОД — INPUT
KLÍČ - КЛЮЧ — KEY

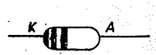
E22 – GA 203
E21, E6 – KA 206

G1, G3 - MBA 145
G2 - MAA 325

E12, E14 - KF 504

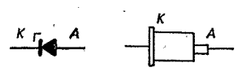


E2, E3, E7 E8 - KA 261
E9, E10, E11, E15, E19, E20



E16 - GAZ 51

E13, E17 - KZZ 71



E1, E4, E5 - KC 149

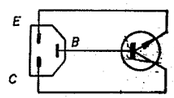
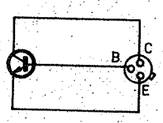


Schéma zesilovače A2
Схема усилителя A2
Diagram of the amplifier A2

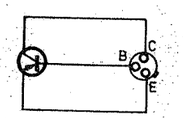
1AF 007 98

BM 526/38

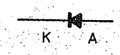
E1, E13, E25, E26, E20 — 1AN 114 14.1 (KSY 71)
E12, E14, E23, E28 — KSY 71
E16, E17 — 1AN 114 13.1 (2×KSY 71)



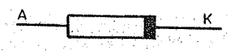
E15, E18 — BSX 29
E2 — 1AN 114 65 (BSX 29)



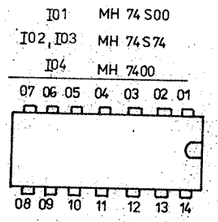
E3, E6, E7, E8, E9, E10, E11, E19, E22 — KA 206
E4, E5, E27 — KA 223



E21 — KZ 260 8V2



I01 MH 74 S00
I02, I03 MH 74 S74
I04 MH 7400



POHLED NA POUZDRO SHORA

Výstup - Выход — Output

Klíč - Ключ — Key

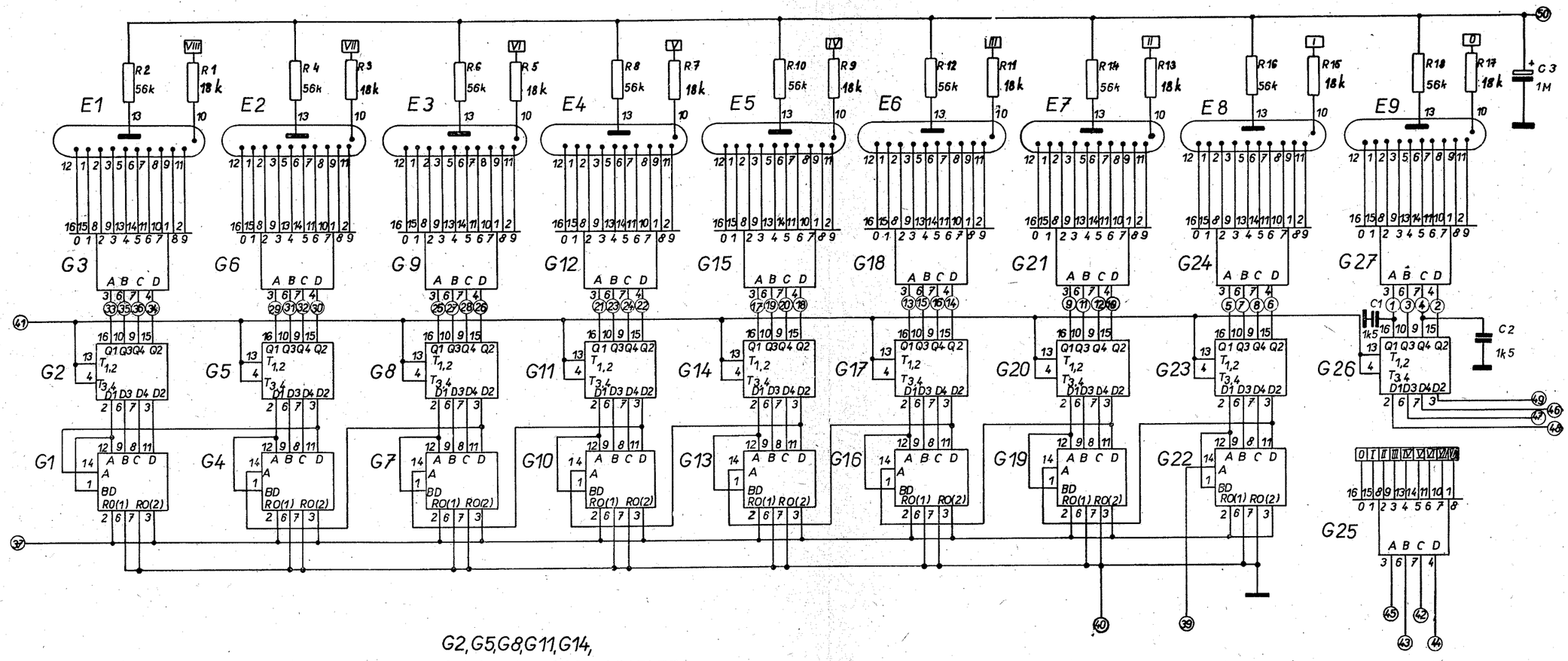
Nulování - Зануление — Zeroizing

Ovládání hradla - Управление вентилем — Gate control

Schéma dekády 100 MHz D100
Схема декады 100 МГц D100
Diagram of the decade 100 MHz D100

1AF 004 07

BM 526/39

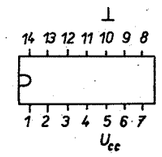


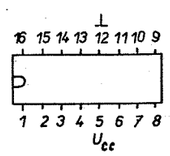
G1,G4,G7,G10,G13,G16,
G19,G22 — MH7490

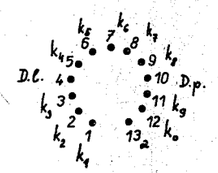
G2,G5,G8,G11,G14,
G17,G20,G23,G26 - MH7475

G3,G6,G9,G12,G15,
G18,G21,G24,G25,G27 - MH74141

E1 až E9 - ZM1080T





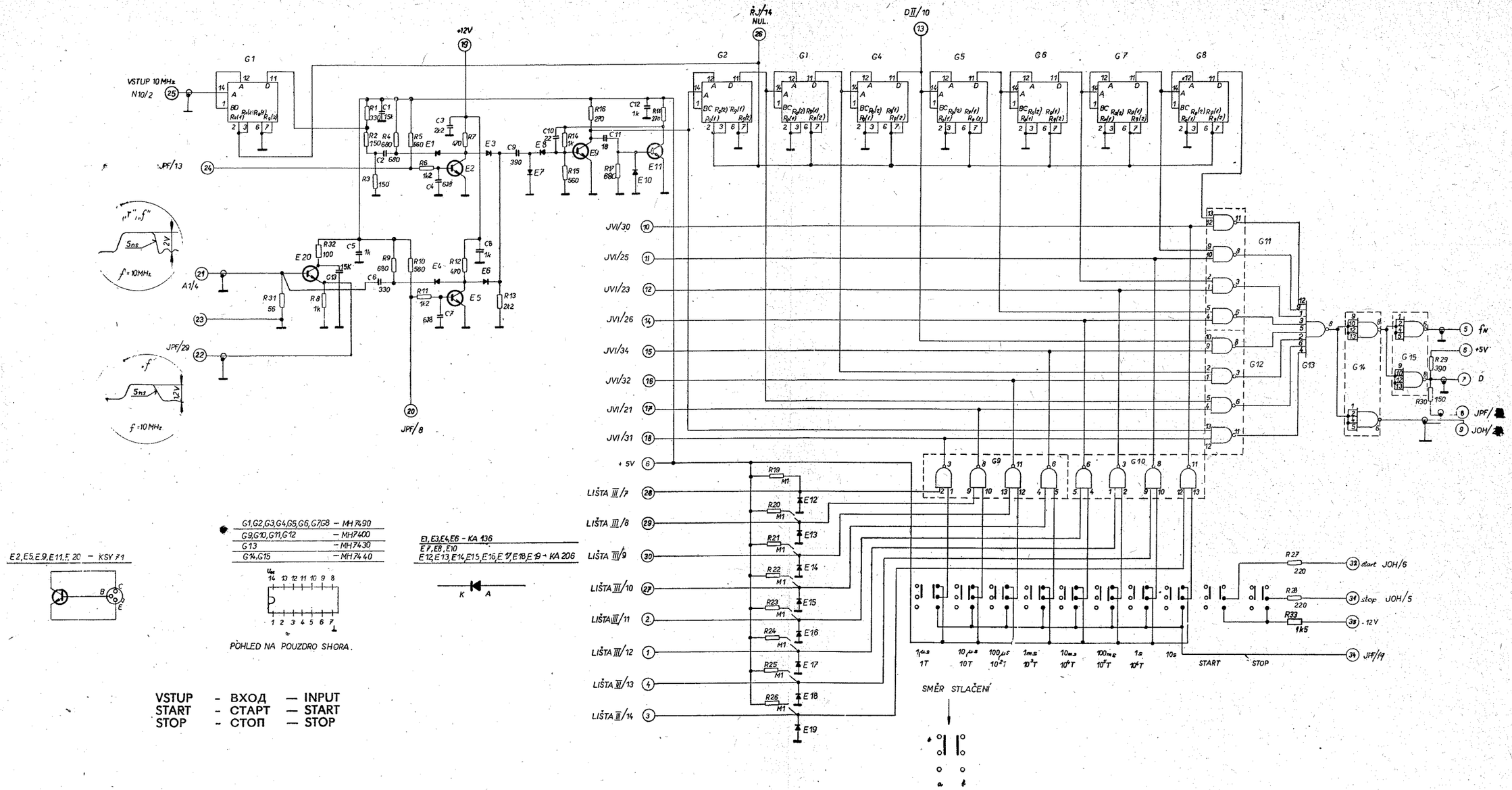


POHLED NA POUZDRA SHORA.

Schéma jednotky počítacích dekád JPD
Схема блока счетных декад JPD
Diagram of the unit of counter decades JPD

1AF 008 00

BM 526/40

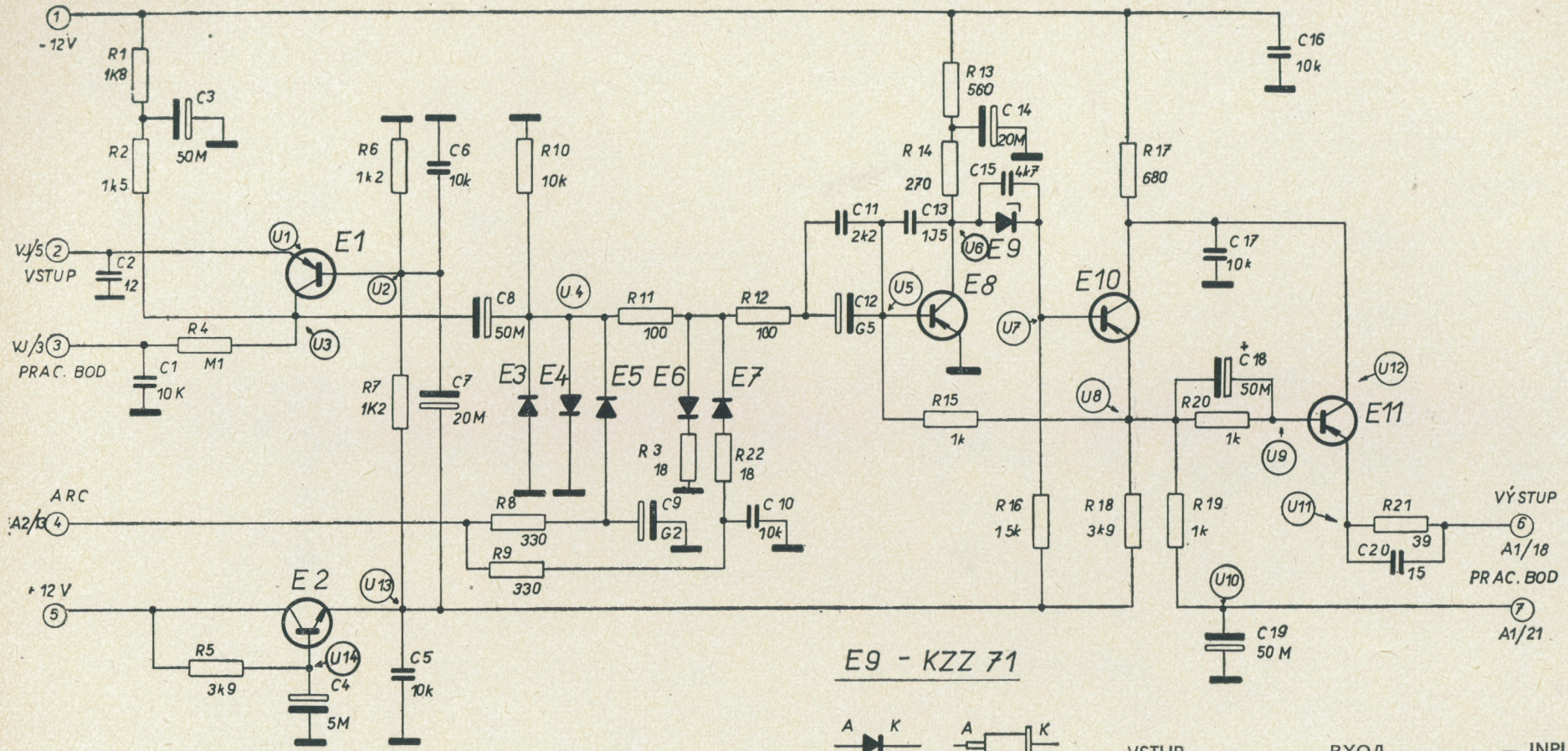


VSTUP - ВХОД — INPUT
START - СТАРТ — START
STOP - СТОП — STOP

Schéma jednotky časové základny JČZ
Схема блока генератора импульсов времени JČZ
Diagram of the unit of time base JČZ

1AF 008 01

BM 526/41

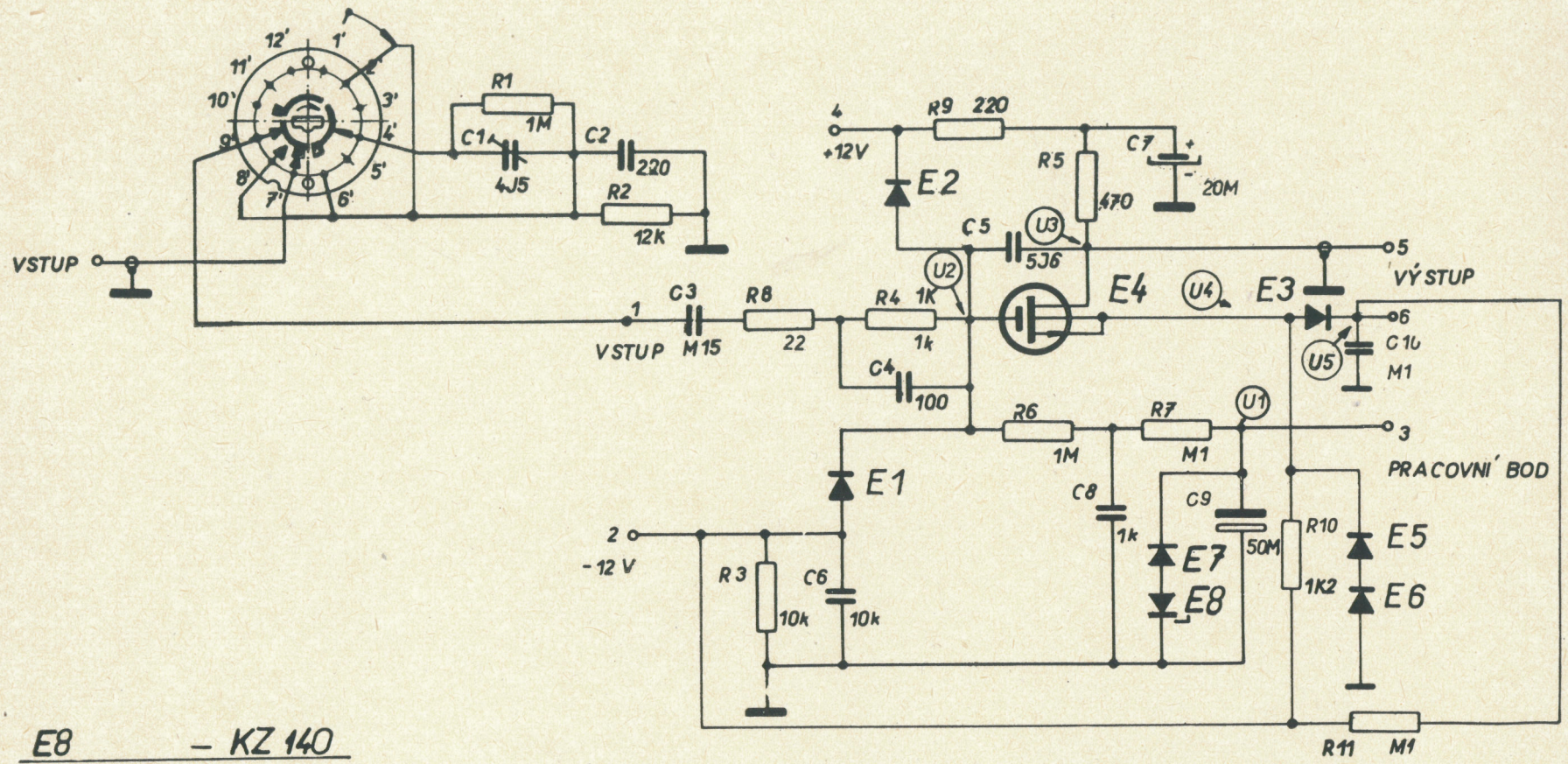


VSTUP	- ВХОД	— INPUT
PRACOVNÍ BOD	- РАБОЧАЯ ТОЧКА	— WORKING POINT
VÝSTUP	- ВЫХОД	— OUTPUT

Schéma předzesilovače
Схема предварительного усилителя
Diagram of the preamplifier

1AF 008 02

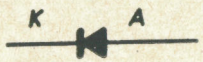
BM 526/42



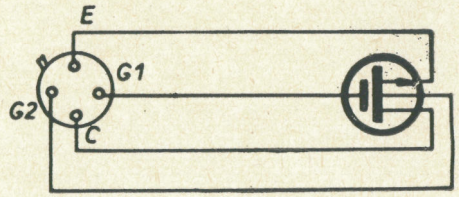
E8 – KZ 140

E1, E2, E3 - KA 221

E5, E6, E7 - KA 136



E4 - KF 521



VSTUP	- ВХОД	— INPUT
PRACOVNÍ BOD	- РАБОЧАЯ ТОЧКА	— WORKING POINT
VÝSTUP	- ВЫХОД	— OUTPUT

Schéma vstupní jednotky
Схема входного блока
Diagram of the input unit

1AF 855 03

BM 526/43

1AF 011 28

1AF 011 29

1AF 011 30

1AF 011 27

1AF 011 31

1AF011 32

1AN 280 81

Schéma kmitočtového normálu
Схема эталона частоты
Diagram of frequency standard

BM 526/44